



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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AUTO SAFETY HOTLINE
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DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Contract DTNH22-94-D-27058
Case DSI-94-AB-016

, 1994

TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CONTRACT NUMBER: DTNH22-94-D-27058
CASE NUMBER: Case DSI-94-AB-016

[REDACTED]

This two vehicle accident happened [REDACTED] 1994 at 2300 hours in [REDACTED] CA. The accident location is a four-leg intersection. The east/westbound roadway is six lanes, divided with a curbed raised median and guardrails located on the median. The roadway edges are curbed. There are two left turn lanes present for each direction of travel. The posted speed limit is 72 KPH (45 MPH). The road is level, and is paved rain grooved concrete. There were no reported unusual roadway conditions and the weather conditions were clear with the roadway surface being dry. Street lights were present and working at the time of the accident.

Vehicle 1, a 1993 Lexus SC 400 2 door, was being driven eastbound in the second lane from the curb by a 57 year-old female attempting to travel straight through the intersection. Vehicle 2, a 1983 Oldsmobile Cutlass, was stopped waiting for the red light directly in front of the path of travel for Vehicle 1. The female driver of Vehicle 1 attempted to avoid hitting Vehicle 2 by applying the brakes and steering her vehicle to the left. The front right struck the back of Vehicle 2. The length of direct contact on the front right bumper of Vehicle 1 was 63 cm (24.8 in.). The investigator assigned Collision Deformation Classification for Vehicle 1 is 12FZEW1. At the time of the vehicle inspection, Vehicle 1 had been dismantled to the point that it was not possible to obtain a crush measurement. The force applied to Vehicle 1 was of sufficient magnitude as to cause the factory installed Supplemental Restraint Systems (driver and passenger side airbags) to deploy.

The driver of Vehicle 1 was wearing hard contact lenses in both eyes at the time of the accident. Contact with the deployed airbag caused the contact lenses to break; this caused numerous injuries to her eyes (please refer to the medical reports). She also sustained minor abrasion injuries to her forehead and upper cheek area from contact with the airbag. The driver was transported to the hospital and subsequently admitted because of her eye injuries. The male front seat passenger of Vehicle 1 sustained abrasions and a laceration to his forehead due to contact with the passenger side airbag. He refused treatment for his injuries.

The police report indicated that the driver of Vehicle 1 had been drinking prior to the accident, but the level of impairment was unknown.

The male driver of Vehicle 2 sustained a minor whiplash type injury to his neck. He reports having broken his seatback as a result of the force applied to his vehicle and the resulting occupant movement.

The on-scene investigating officer authorized towing of both vehicles from the scene.

A representative from the Lexus Western Division inspected the case vehicle and generated a Product Information Report, however, we were unable to obtain a copy of the report.

This research was supported by the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation, under contract number DTNH22-94-D-27058. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the NHTSA.

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Abbreviations Used In Narrative, Scene And Photographic Documentation

ft	Feet
in	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

ACCIDENT DATA:

Location: ██████████ County, CA
Area/Type: Urban
Date/Time: Summer/Weekday
Accident Type: Car/Car, rear-end

INJURY SEVERITY:

Vehicle 1: Driver - AIS-1
R/F Occupant - AIS-1

Vehicle 2: Driver - AIS-1

AMBIENCE:

Viewing Conditions: Dark-street lights, no viewing restrictions
Cloud Cover: Scattered Cloud Cover
Precipitation: None
Temperature: 18°C (65°F)
Road Surface: Dry

ROADWAY:

	<u>VEHICLE 1</u>	<u>VEHICLE 2</u>
Type:	6-lane, divided; 3-lane eastbound	6-lane, divided; 3-lane eastbound
Width:	3.7 m (12.2 ft)	3.7 m (12.2 ft)
Traffic Density:	Light	Light
Median:	Concrete Curb	Concrete Curb
Edge:	Curb	Curb
Surface:	Concrete	Concrete
Reported Defects:	None	None
Co-efficient of Friction (est.):	0.70	0.70
Vertical Alignment:	Level	Level
Horizontal Alignment:	Straight	Straight

TRAFFIC CONTROLS:

	<u>VEHICLE 1</u>	<u>VEHICLE 2</u>
Signals:	Standard Traffic Signal, working proved out	Standard Traffic Signal, working proved out
Signs:	None related	None related
Speed Limit:	72 KPH (45 MPH)	72 KPH (45 MPH)
Markings:	Normal Roadway Markings	Normal Roadway Markings

VEHICLES:

	<u>VEHICLE 1</u>	<u>VEHICLE 2</u>
Description:	1993 Lexus SC 400	1983 Oldsmobile Cutlass
Odometer:	Unknown	Unknown
Engine:	4.0 L / V8	3.8 L / V6
Brake System:	Anti-Lock	Unknown
Vehicle Modifications:	None	Unknown
Tire Condition:	Normal	Unknown
Manual Restraints:	3-point lap/shoulder restraints in the four outboard seating positions, C/R lap belt	Non-passive manual belts, per V.I.N.
Automatic Restraints:	Supplemental Restraint System (driver's side and passenger's side airbag)	None
Reported Defects:	None	None
Cargo:	None	Unknown
Windshield Damage:	None	Unknown
Fleet:	None	None
Tow Status:	Towed, disabling damage	Towed, disabling damage

VEHICLE DAMAGE:

	<u>VEHICLE 1</u>	<u>VEHICLE 2</u>
Object Struck:	Vehicle 2 and guardrail	Vehicle 1
Event Number:	01, 02	01
CDC:	12FZEW1 12FLLS1	Unknown
Maximum Crush:	Zone 1	Unknown

VEHICLE VELOCITY ESTIMATES:

	<u>VEHICLE 1</u>	<u>VEHICLE 2</u>
Impact Speed (estimated):	56-64 KPH (35-40 MPH)	0, Stopped
Total Delta V:	Not computed, insufficient data, Vehicle 1 was being repaired at the time of inspection and Vehicle 2 was not inspected	Not computed, insufficient data, Vehicle 1 was being repaired at the time of inspection and Vehicle 2 was not inspected

Longitudinal Delta V:

Lateral Delta V:

Energy Dissipation:

COLLISION SEQUENCE:

PRE-CRASH:

Vehicle 1 was travelling eastbound in the center through lane of a six-lane, divided roadway at a unknown speed approaching an intersection. Vehicle 2, a 1983 Oldsmobile Cutlass, was travelling eastbound directly in front of Vehicle 1. The male driver of Vehicle 2 had stopped his vehicle for the red traffic light. The female driver of Vehicle 1 apparently did not notice that Vehicle 2 stopped. The driver of Vehicle 1 attempted to avoid the collision by applying the brakes and steering left.

CRASH:

The right front of Vehicle 1 struck the left rear of Vehicle 2. Resultant direction of force for Vehicle 1 was 005 degrees. The Delta V was not computed for this collision due to insufficient data for the reconstruction algorithm of CRASH III PC or the missing vehicle algorithm. The forces in this collision exceeded the manufacturer's threshold in the Supplemental Restraint Systems, and the driver's and passenger's side airbags deployed

The impact shifted Vehicle 1 in an insignificant clockwise direction and Vehicle 1 continued forward and to the left, which was the direction of travel prior to impact. Vehicle 2 was pushed in a longitudinal direction and to the left in a slight clockwise direction.

Vehicle 1 continued forward, through the intersection and impacted a guardrail. The guardrail location is in the center curbed median.

POST CRASH:

The final resting point for Vehicle 1 was past the intersection approximately 170 feet after the initial impact. Vehicle 2 was pushed largely longitudinally and to the left in a slight clockwise direction and came to rest facing in an easterly direction within the intersection on all four wheels.

KINEMATICS:

The driver of Vehicle 1 sustained minor skin injuries about the forehead and upper cheek from contact with the airbag. She also received numerous injuries to her eyes from striking the airbag which caused her hard contact lens to break; maximum AIS = AIS-1. These types of injuries are possible given the principal direction of force applied to Vehicle 1 and the resultant occupant movement. The right front passenger sustained minor skin injuries to his forehead which consisted of an abrasion and laceration; maximum AIS = AIS-1. Again, these types of injuries are possible given the principal direction of force applied to the vehicle and the resultant occupant movement. The driver of Vehicle 2 reported a whiplash injury to his neck; maximum AIS = AIS-1. This type of injury is probable given the principal direction of force applied to Vehicle 2 and the resultant occupant movement.

SUPPLEMENTAL RESTRAINT SYSTEM:

Vehicle 1 was equipped with Supplemental Restraint Systems (driver's and passenger's side airbags). The air bags deployed as a result of the initial frontal collision. The vehicle inspection indicated occupant contact to the vehicle interior which would indicate that the driver was not wearing her available 3-point, manual lap/shoulder restraints. The right front passenger reported wearing the available 3-point, manual lap/shoulder restraints and reports contact with the airbag.

SCENE CLEARANCE: Both vehicles sustained disabling damage and authorization for tow from the scene was obtained from the investigating officer.

SAFETY STANDARDS: There were no violations of Federal Motor Vehicle Safety Standards noted during the on-site inspection of Vehicle 1.

OCCUPANT DATA:

VEHICLE 1

	<u>DRIVER</u>	<u>Occupant 2</u>
Age/Sex:	57/Female	60/Male
Seated Position:	Left Front	Right Front
Seat Type:	Bucket	Bucket
Height:	170 cm (67 in)	193 cm (76 in)
Weight:	68 kg (150 lb)	95 kg (210 lb)
Occupation:	Business Owner	Business Owner
Pre-existing Medical Condition:	Allergy to Iodine	Unknown
Alcohol/Drug Involvement:	Yes/Impairment unknown	N/A
Driving Experience:	41 years	N/A
Body Posture:	Normal upright	Unknown, asleep
Hand Position:	Normal, placed on wheel	Normal
Foot Position:	Right on brake, left on floor	Normal
Restraint Usage:	Supplemental Restraint System (driver's side airbag)	Supplemental Restraint System (passenger's side airbag)
Additional Occupants:	One	None

OCCUPANT DATA:

VEHICLE 2

DRIVER

Age/Sex:	53/Male
Seated Position:	Left Front
Seat Type:	Unknown
Height:	183 cm (72 in)
Weight:	86 kg (190 lb)
Occupation:	Unknown
Pre-existing Medical Condition:	None reported
Alcohol/Drug Involvement:	None
Driving Experience:	37 years
Body Posture:	Normal, upright
Hand Position:	Unknown
Foot Position:	Right on brake, left on floor
Restraint Usage:	None used
Additional Occupants:	None

INJURIES:**Vehicle 1**

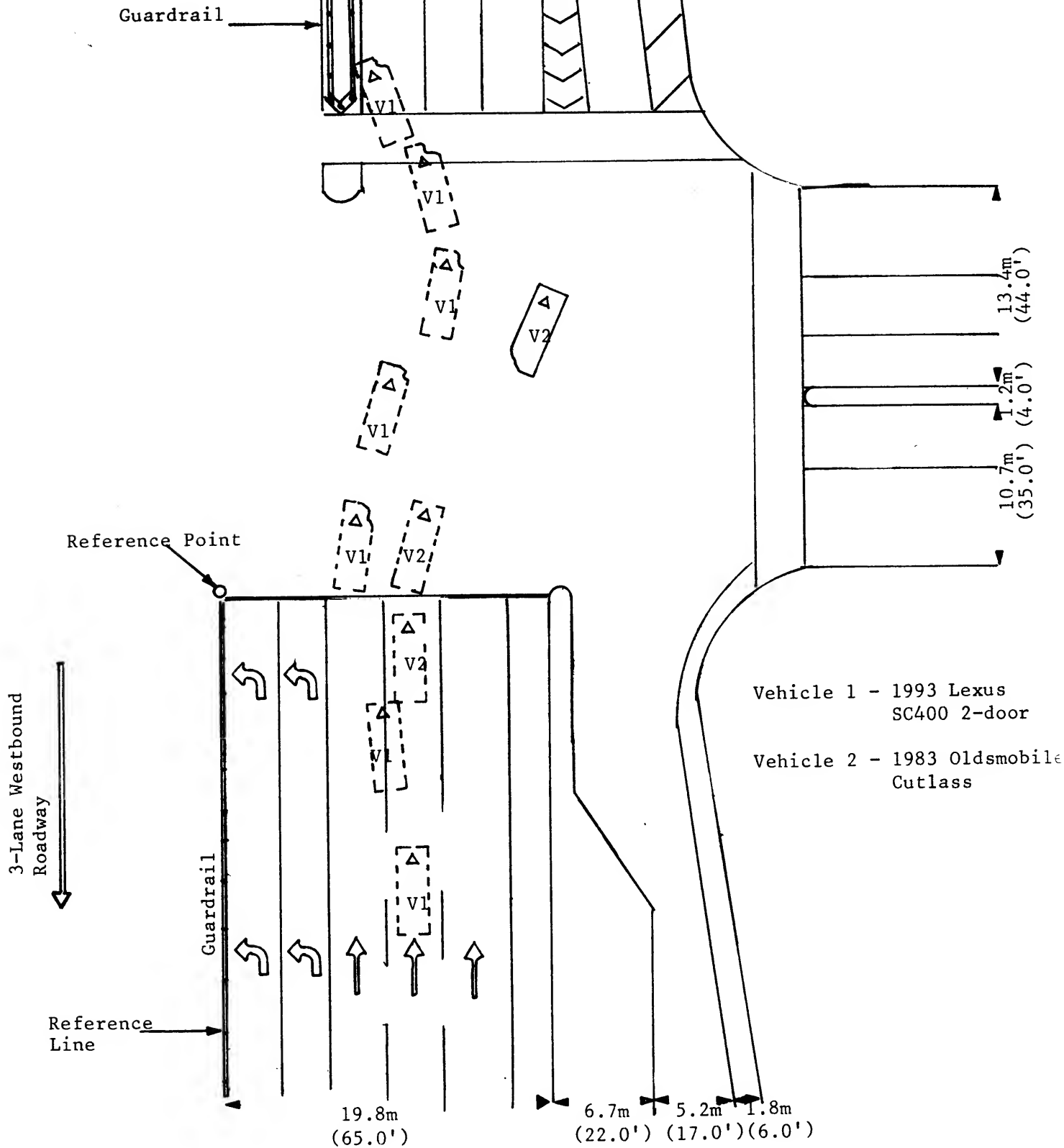
	<u>INJURY</u>	<u>OIC CODE</u>	<u>ICD-9</u>	<u>SOURCE</u>
DRIVER	Abrasion, right lower eyelid	297202.1,1	918.0	Airbag
	Abrasion, left lower eyelid	297202.1,2	918.0	Airbag
	Conjunctiva hemorrhage, left eye	240416.1,2	372.72	Airbag
	Conjunctiva hemorrhage, right eye	240416.1,1	372.72	Airbag
	Lenitcular shaped disruption of the right iris between 7 and 8 o'clock (tear/iridodialysis)	240900.1,1	871.1	Airbag
	Edema w/ ecchymosis of the mucosal surface of the left upper lip	243202.1,8	920.0	Airbag
	Acute bilateral hyphema, (left and right eyes)	240604.1,1 240604.1,2	364.41 364.41	Airbag Airbag
	Abrasion, right cheek	290202.1,1	910.0	Airbag
	Vitreous hemorrhage, right eye	241699.1,1	379.23	Airbag
	Posterior vitreous detachment, right eye	241699.1,1	379.21	Airbag
R/F Occupant:	Abrasion, forehead	290202.1,7	910.0	Airbag
	Lacerated, forehead	290600.1,7	873.42	Airbag
R/F Occupant:	Abrasion, forehead	290202.1,7	910.0	Airbag

Vehicle 2

DRIVER:	Whiplash	640278.1,6	847.0	Impact forces
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DYNAMIC SCIENCE
DSI-94-AB-016
1 cm = 3.6 meters
1 in = 30 feet



COLLISION MEASUREMENTS

Case Number DSI-94-AB-016

Reference Point: Sign post in west median of the intersection

Reference Line: South curb line of the eastbound travel lanes

DATA POINT	DISTANCE AND DIRECTION FROM REFERENCE POINT	DISTANCE AND DIRECTION FROM REFERENCE LINE
Eastbound Travel Lanes		
1st solid white painted line	0	S 3.2 m (10.6 ft)
2nd solid white painted line	0	S 6.6 m (21.6 ft)
1st broken white painted line	0	S 10.5 m (34.3 ft)
2nd broken white painted line	0	S 14.2 m (46.5 ft)
3rd solid white painted line	0	S 18.0 m (59.1 ft)
South curb line of the eastbound travel lanes	0	S 20.4 m (66.9 ft)
North/South Bound Travel lanes		
1st broken white painted line	E 5.9 m (19.5 ft)	0
West curb of median	E 10.0 m (32.9 ft)	0
East curb of median	E 11.3 m (37.1 ft)	0
1st solid white painted line	E 15.1 m (49.7 ft)	0
2nd broken white painted line	E 18.9 m (62.1 ft)	0
East curb line of the north/southbound travel lanes	E 24.7 m (81.0 ft)	0
1st POI (Vehicle 1 and 2) approx.	W 3.6 m (12.0 ft)	S 11.9 m (39.0 ft)
2nd POI (Vehicle 1 and guardrail) approx.	E 32.0 m (105.0 ft)	S 6.4 m (21.0 ft)

PHOTO INDEX

Case No. DSI-94-AB-016

PHOTO NO.	VEHICLE NO.	ORIENTATION	SUBJECT MATTER
1-2	1 and 2	East	Direction of travel
3	1 and 2	East	Area of impact
4	1	East	Post impact travel, guardrail, area of final rest
5	2	East	Post impact travel, area of final rest
6	1 and 2	West	Opposite direction of travel
7-10	1		Vehicle 1 exterior, photographs supplied by driver
11-15	1		Airbag deployments, photographs supplied by driver
16-32	1		Vehicle exterior
33-40	1		Driver's side airbag and occupant contact point (lipstick)
41-49	1		Driver and passenger side visor, windshield header. Occupant contact on driver's side
50-55	1		Passenger side airbag
56-57	1		Back seat area
58-59	1		Seat belt buckle scratching
60-63	1		Driver injuries, photographs provided by driver
64-67	1		Driver eye injuries, photographs provided by doctor

“GRAPHIC” PHOTOGRAPHS AND IMAGES

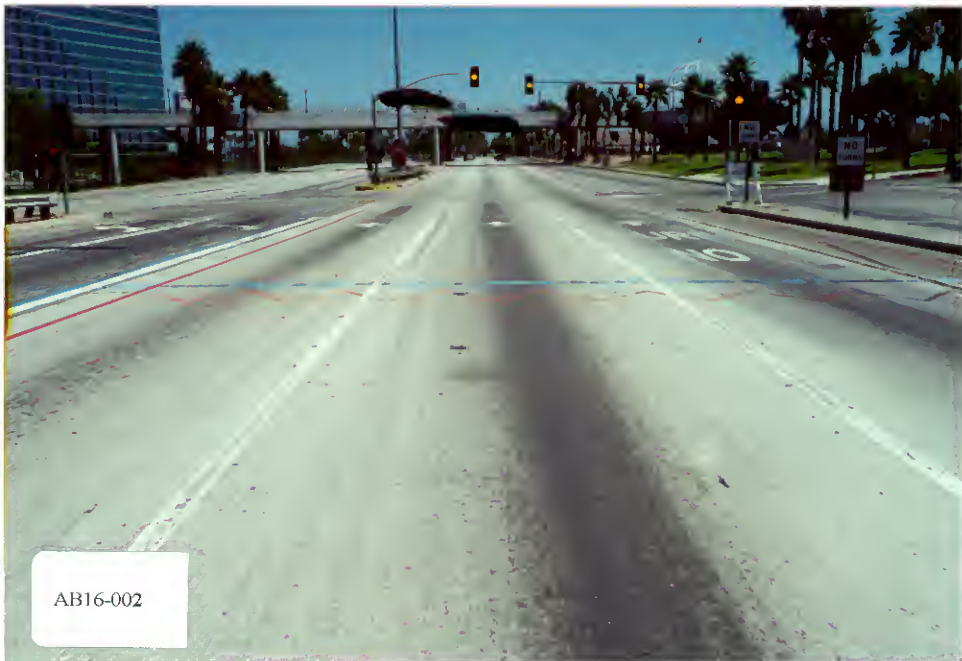
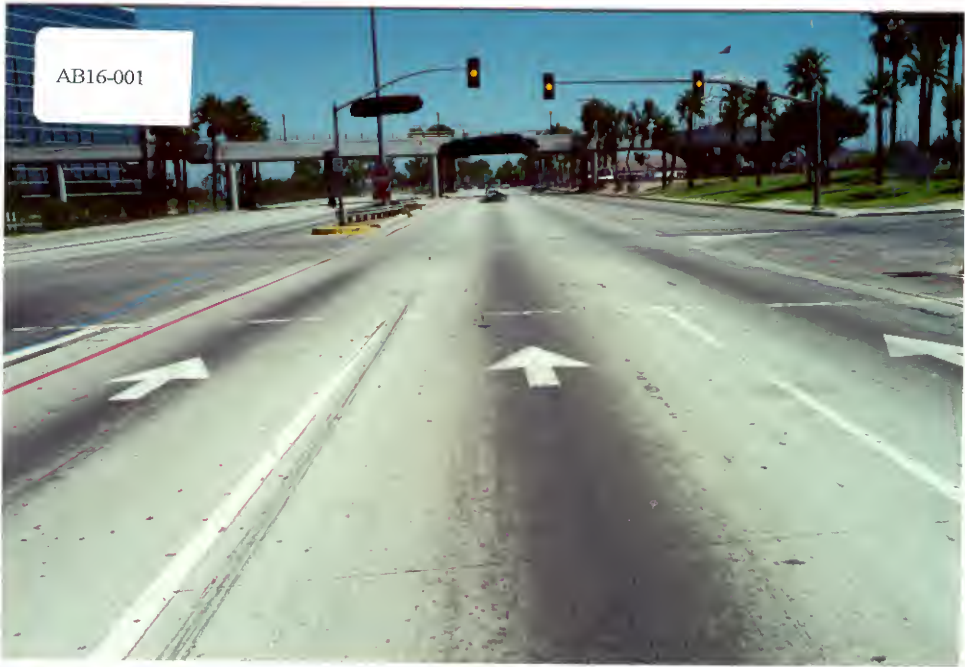
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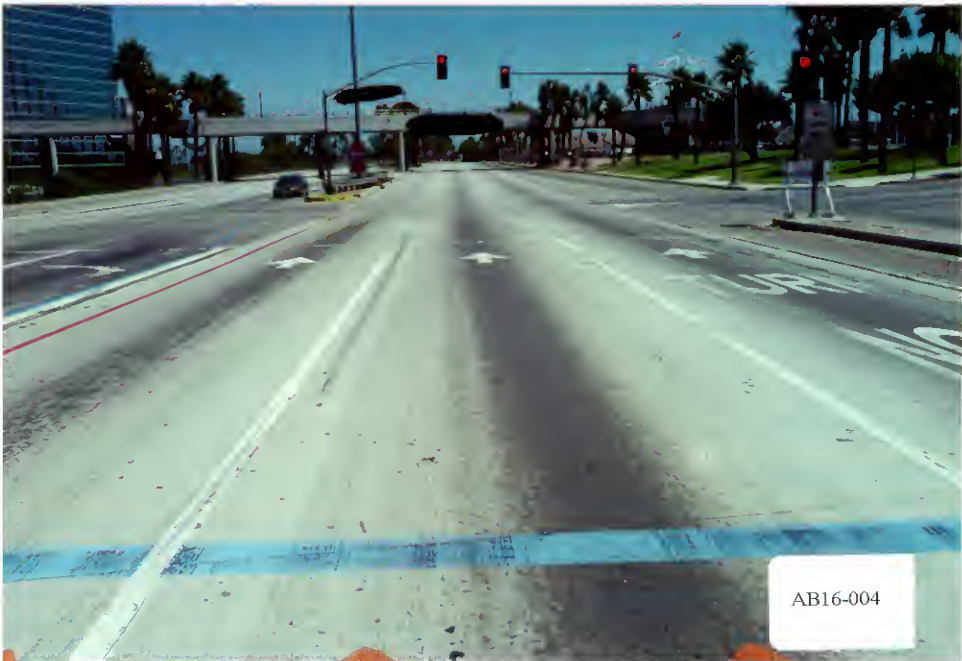
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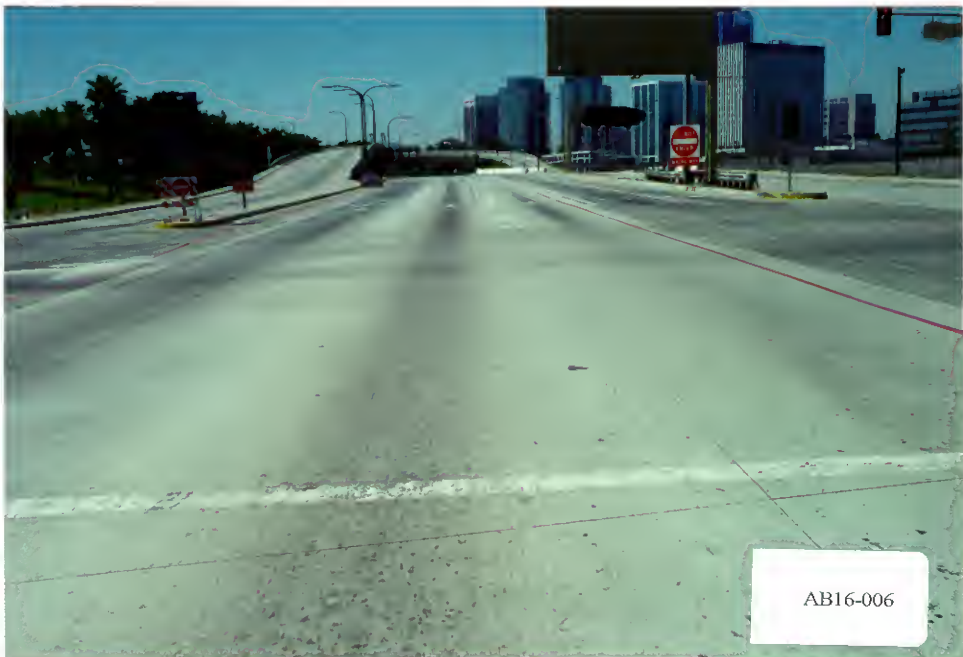
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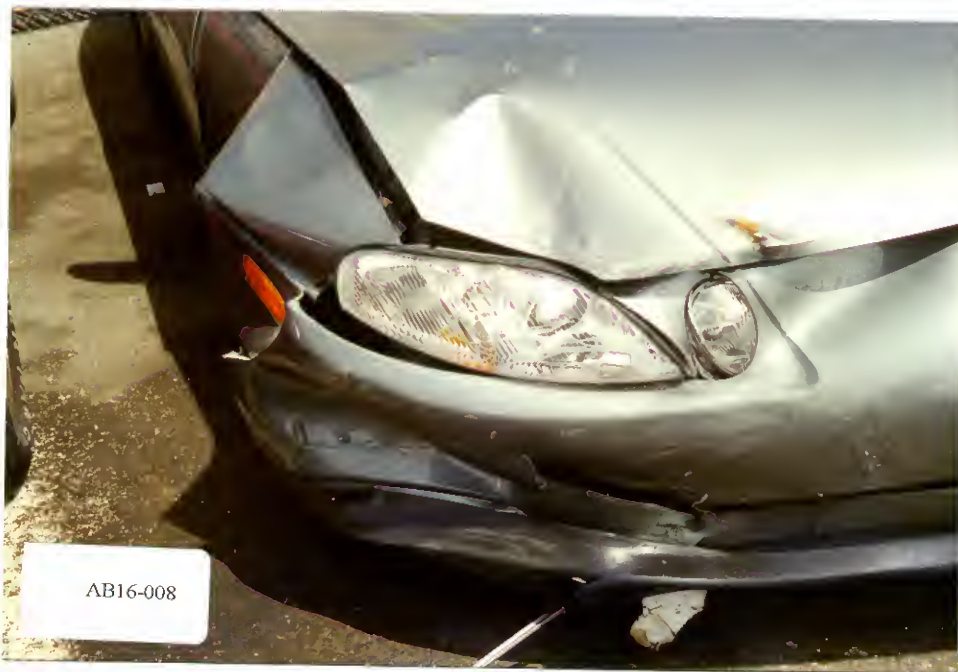
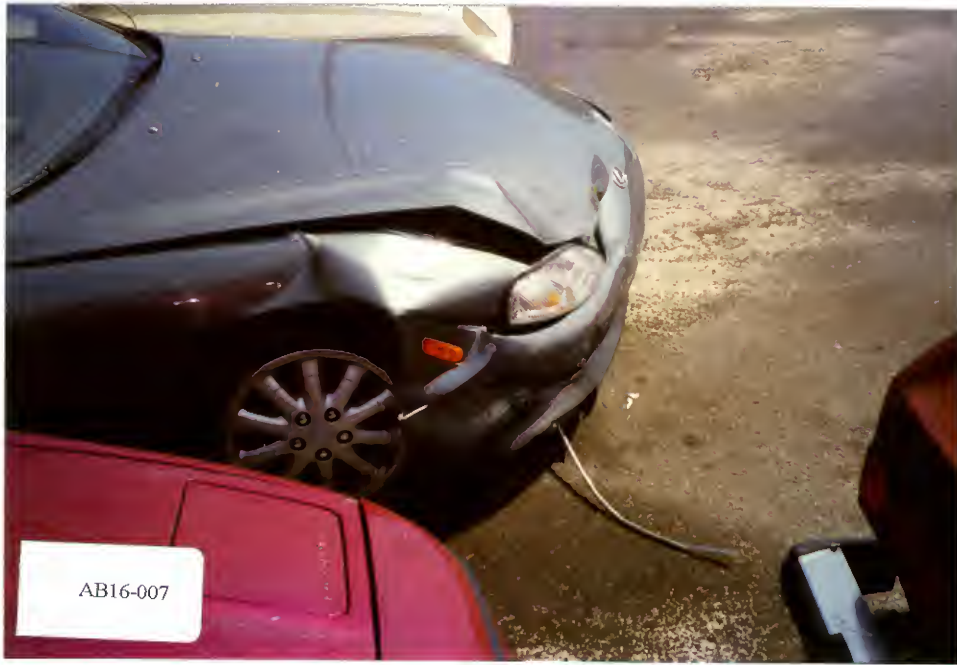
MARJORIE SACCOCCIO
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
55 BROADWAY
CAMBRIDGE, MA 02142

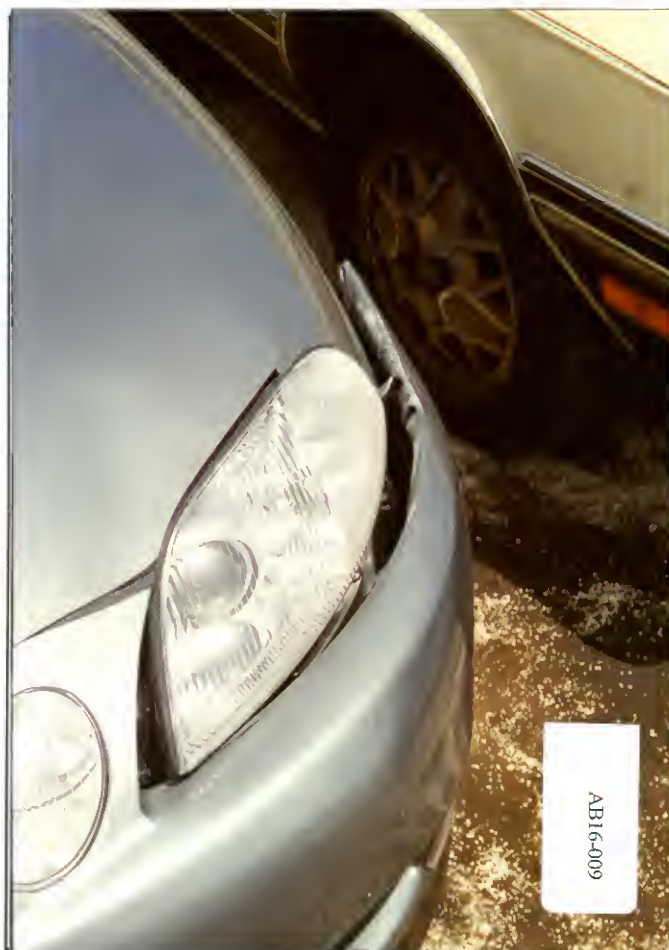
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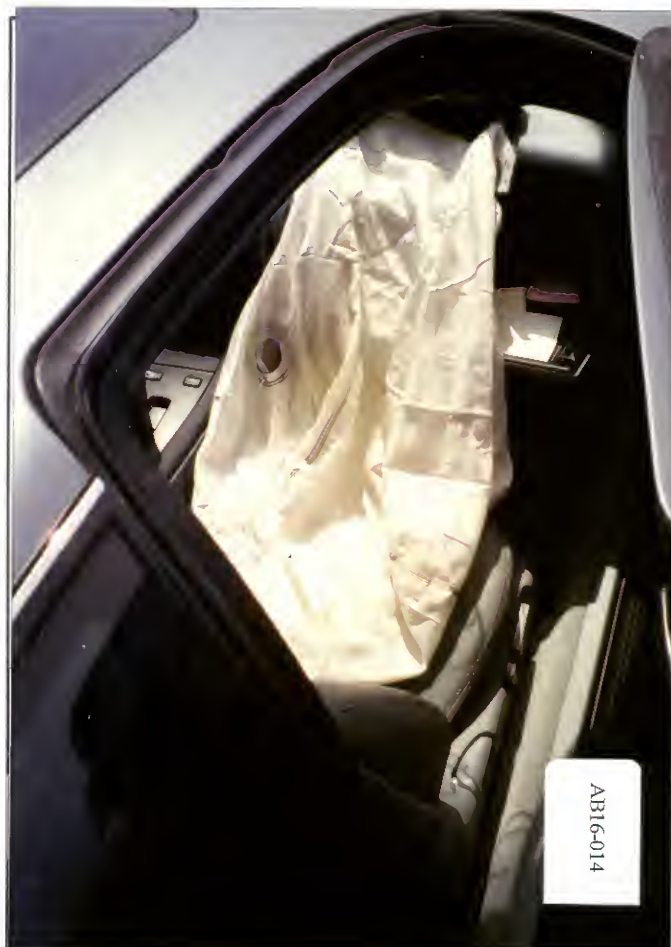


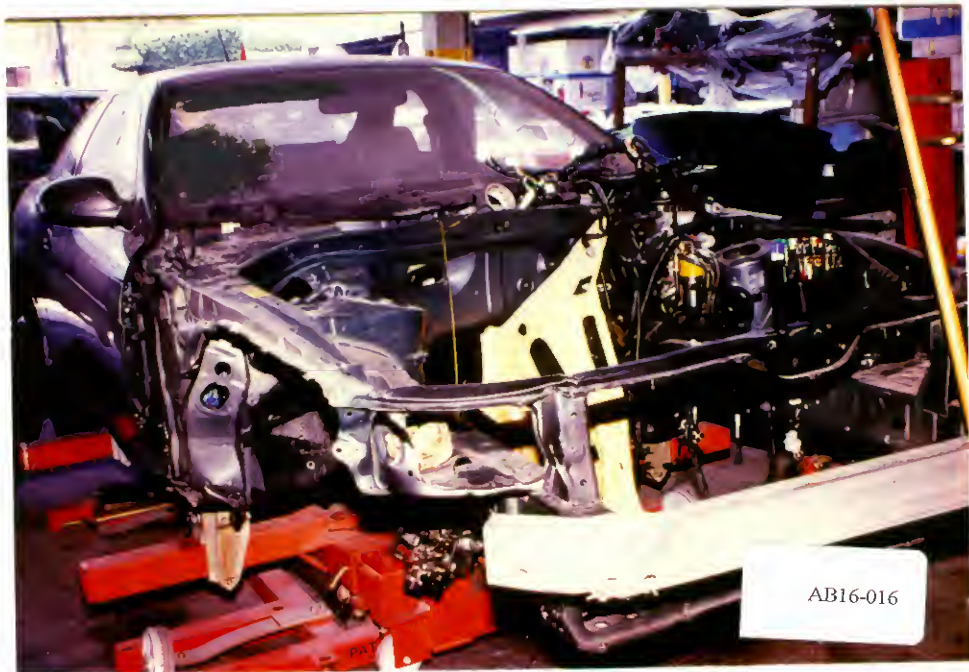
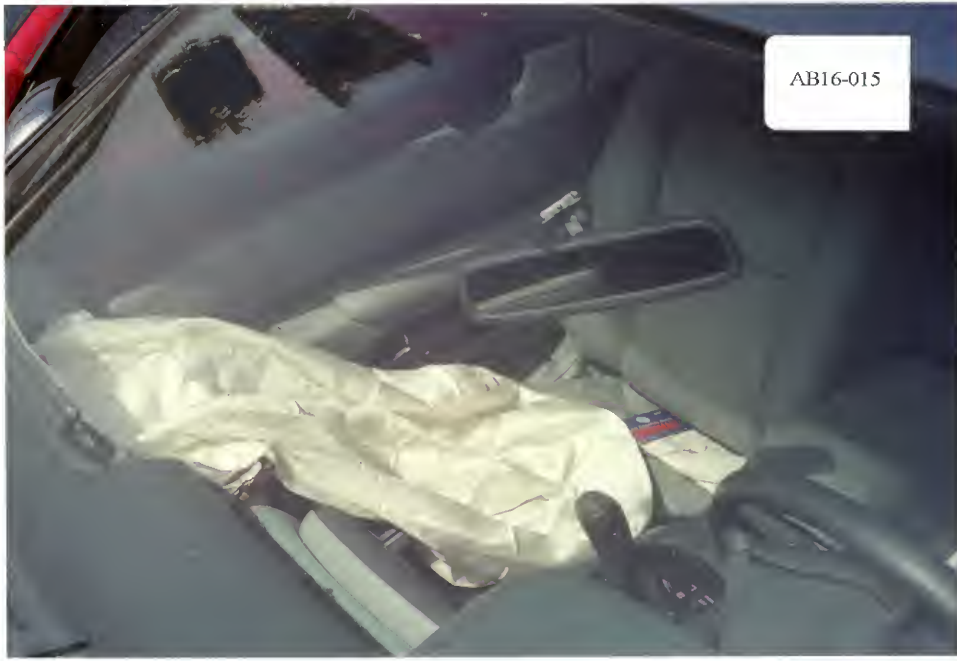


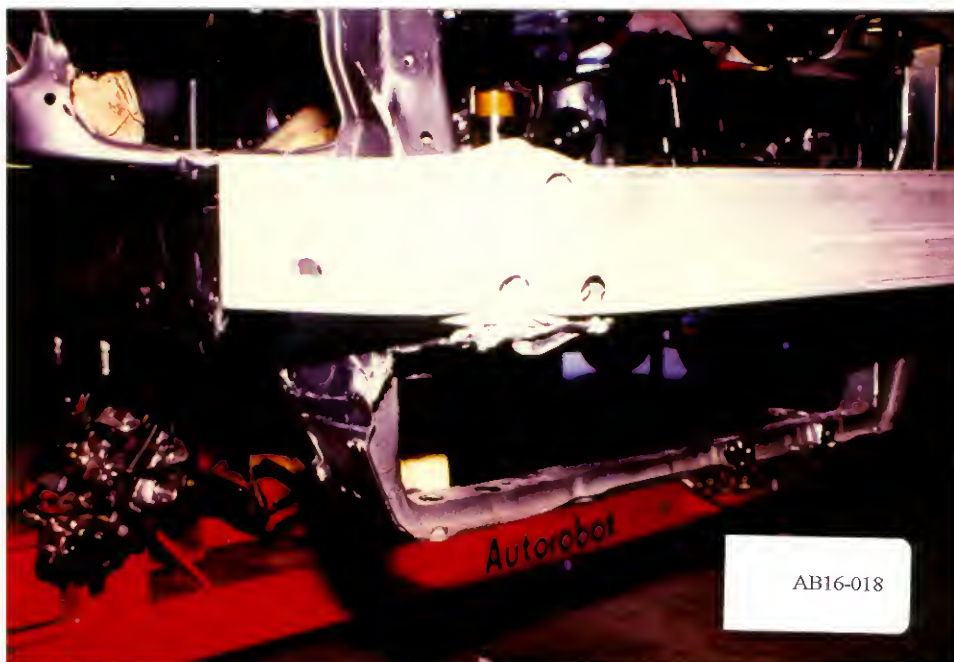
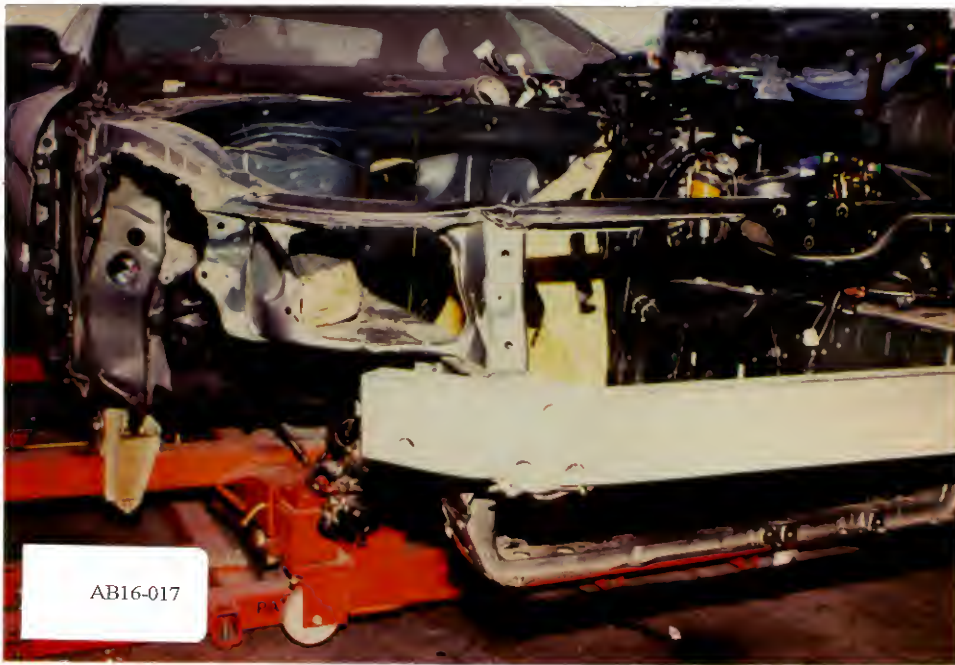


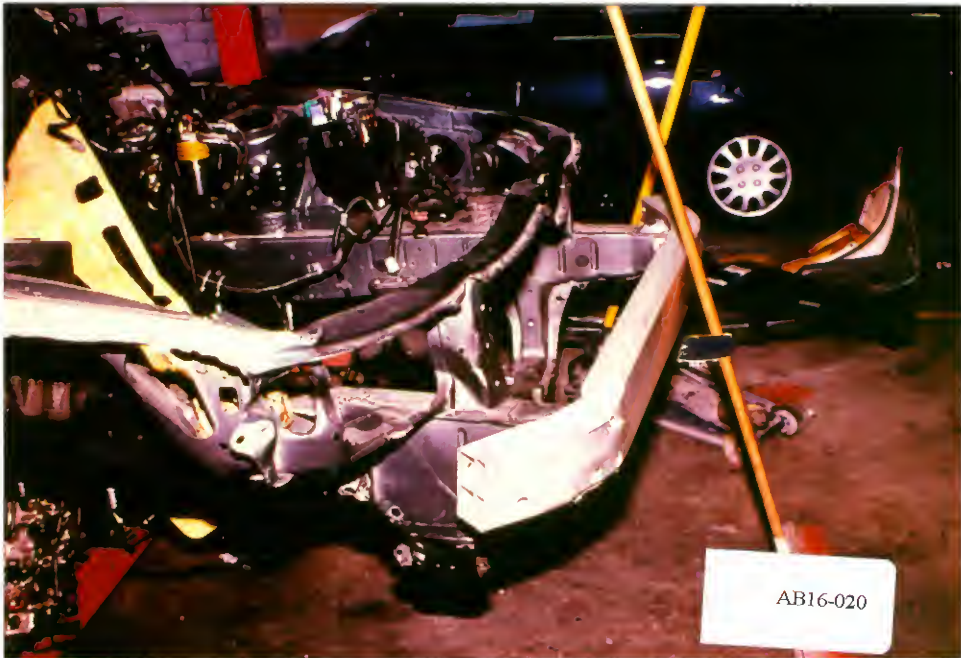
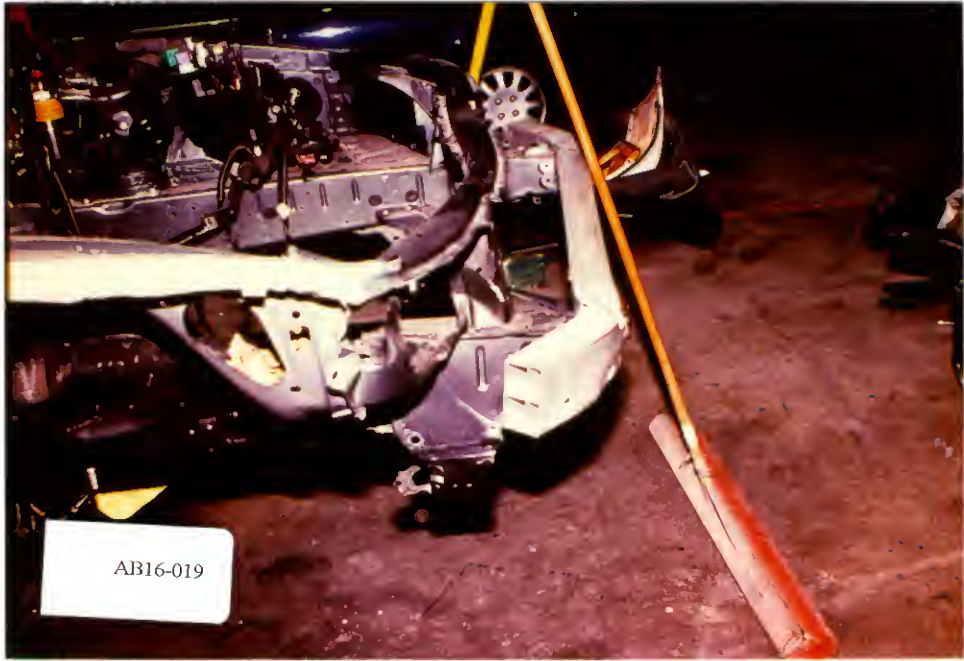


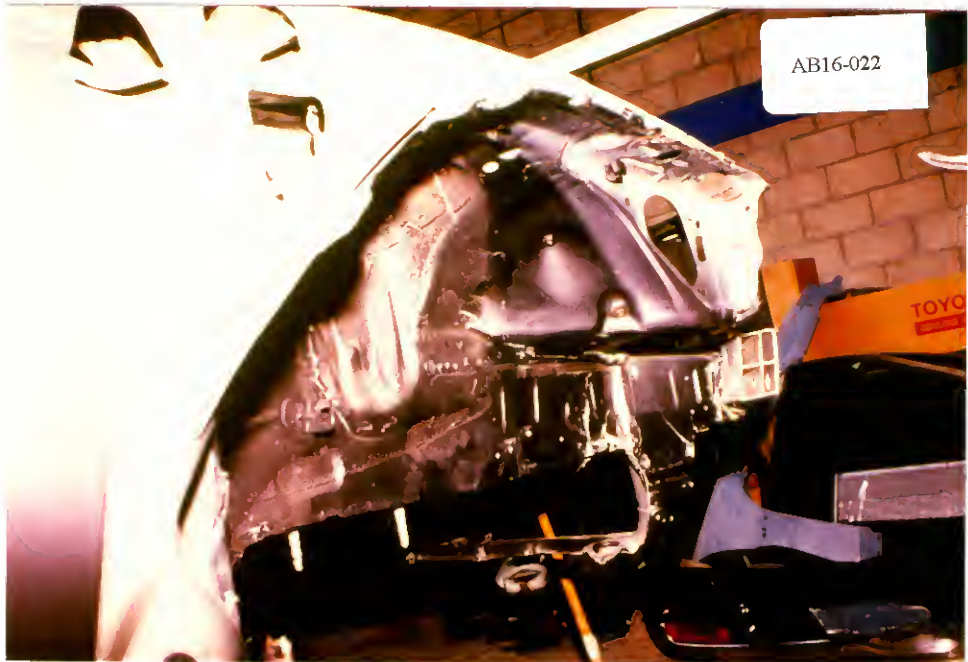
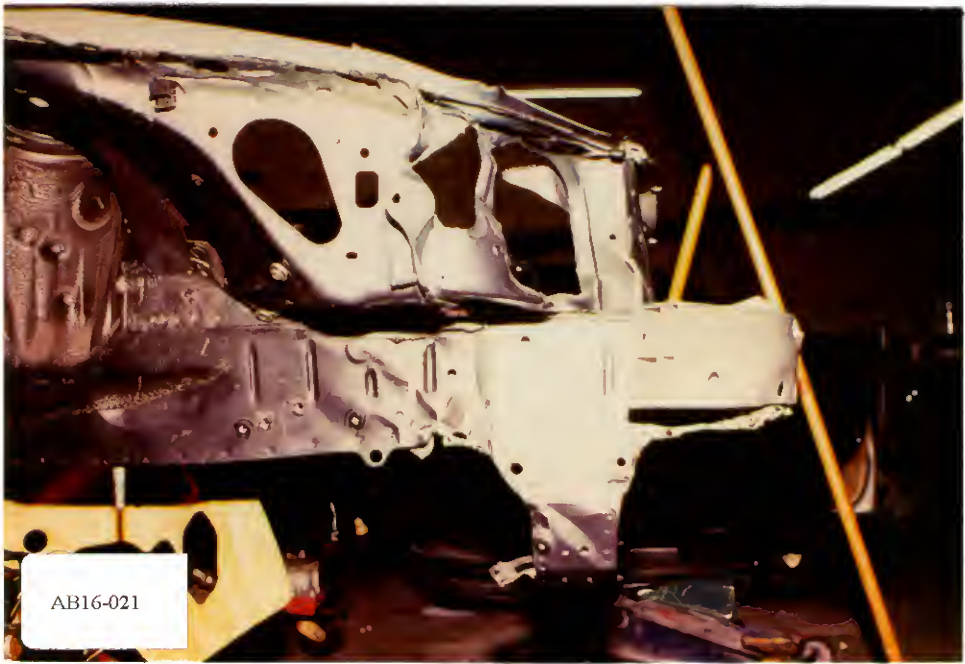




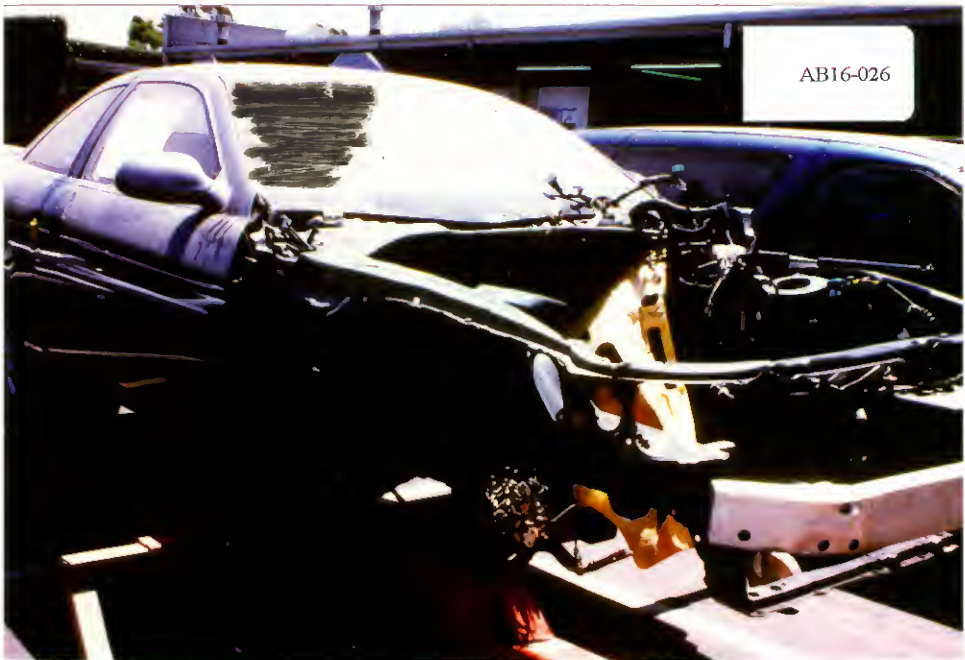


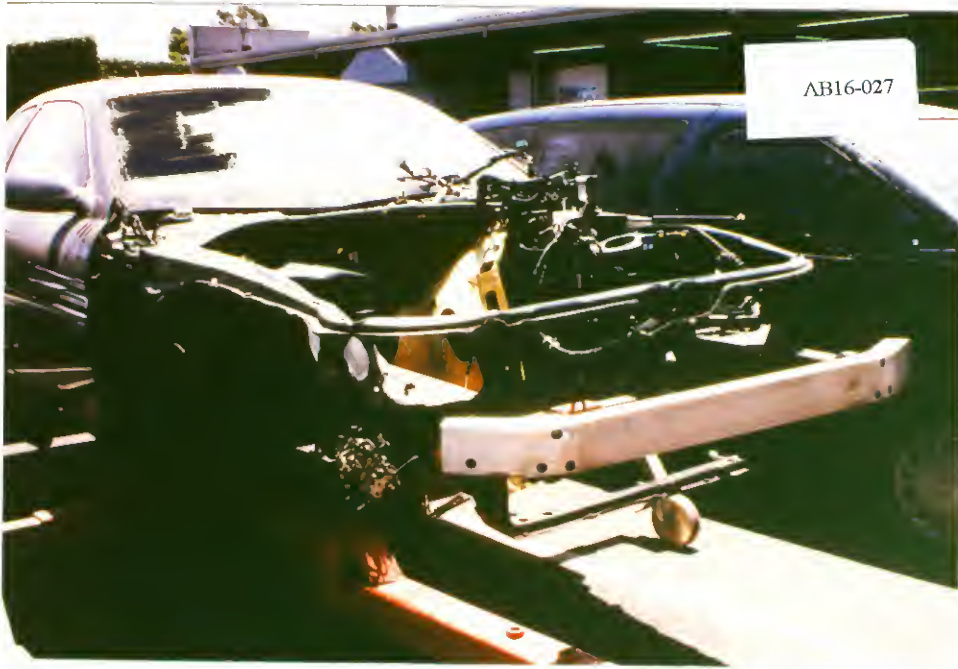


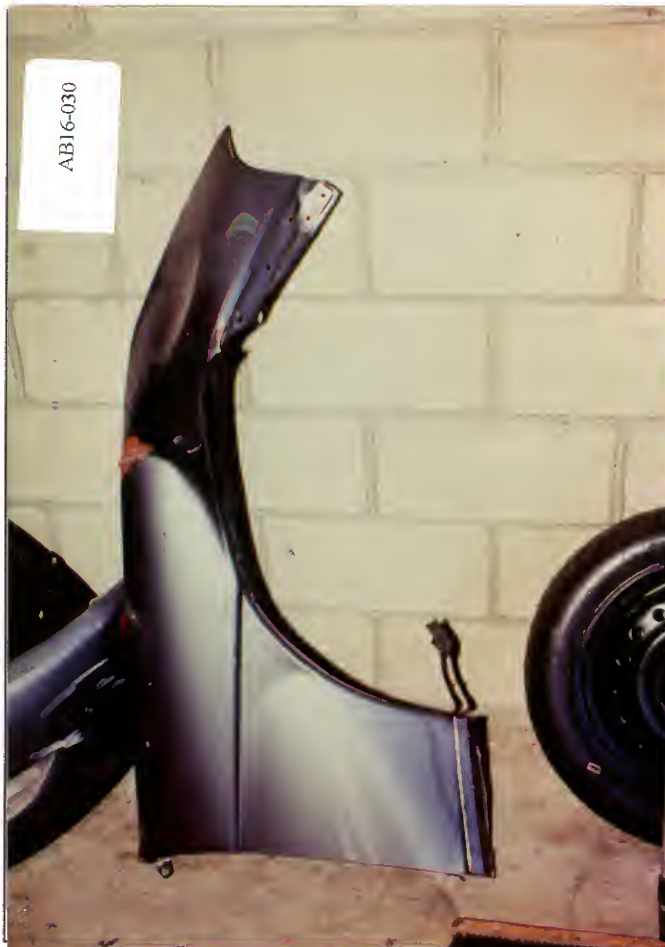
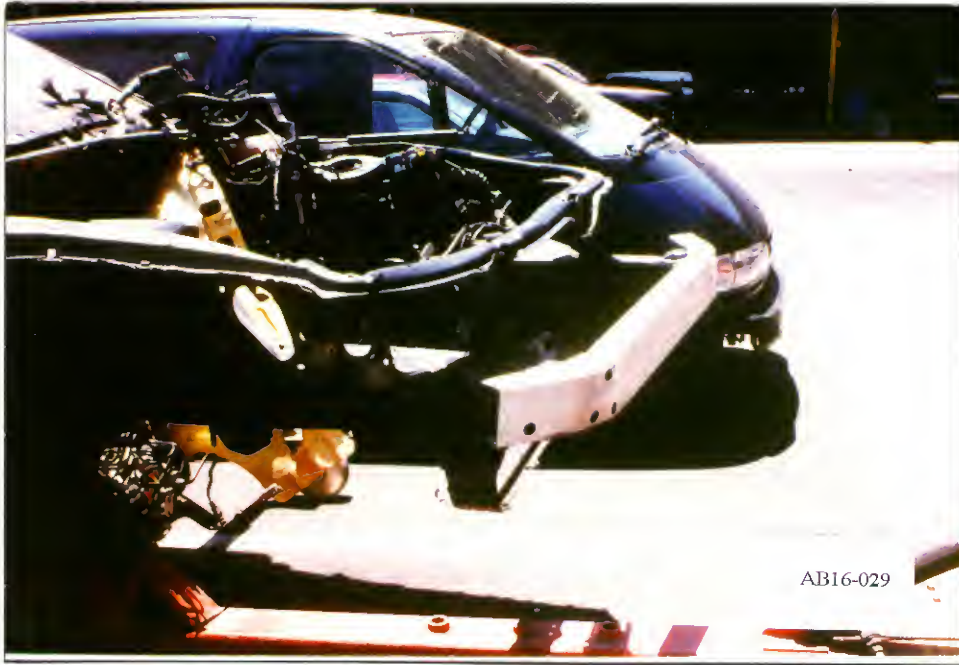


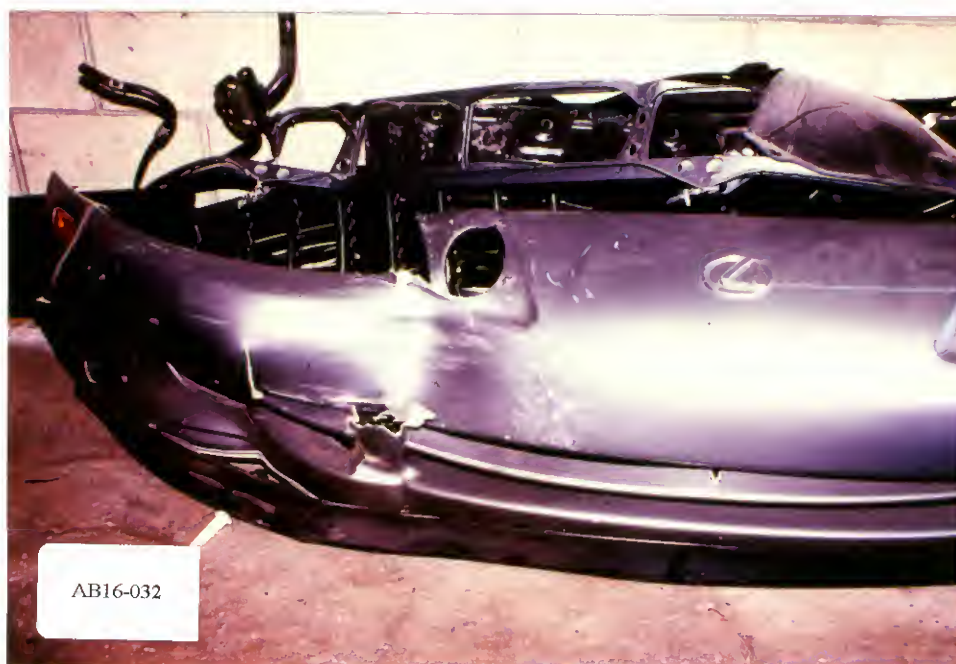
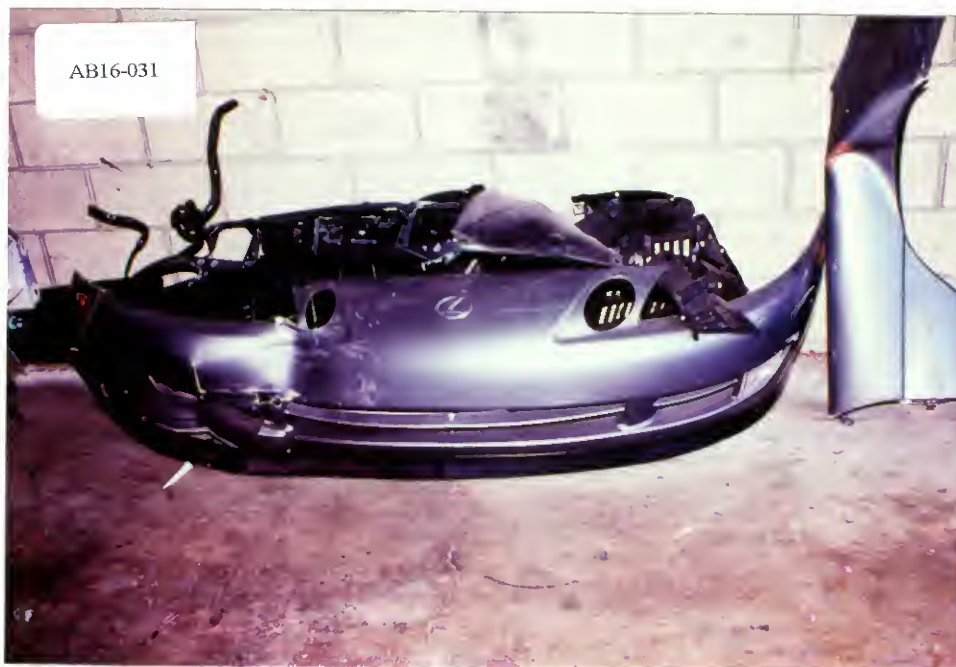


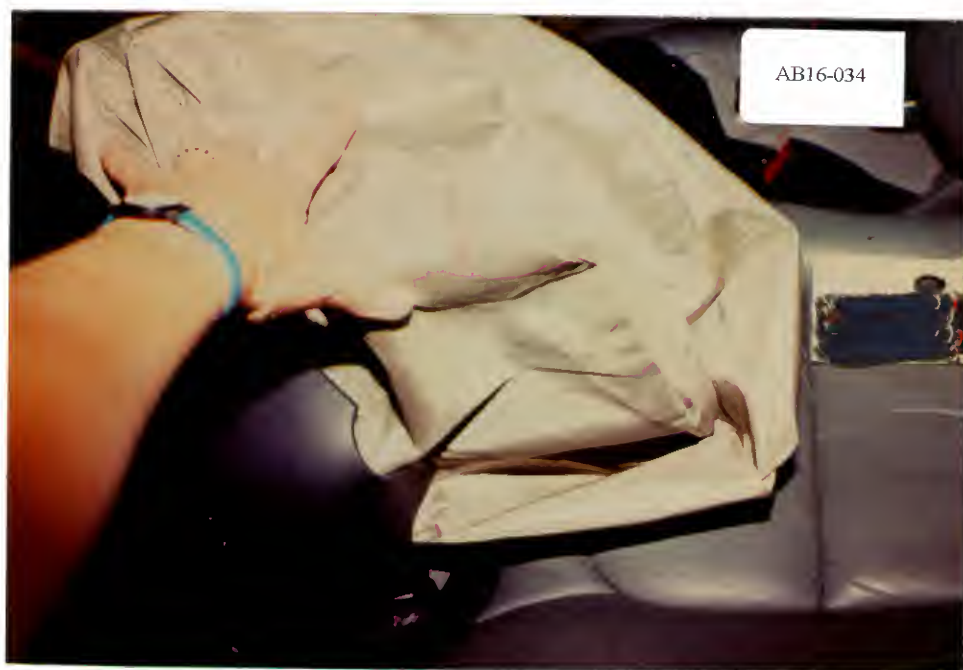




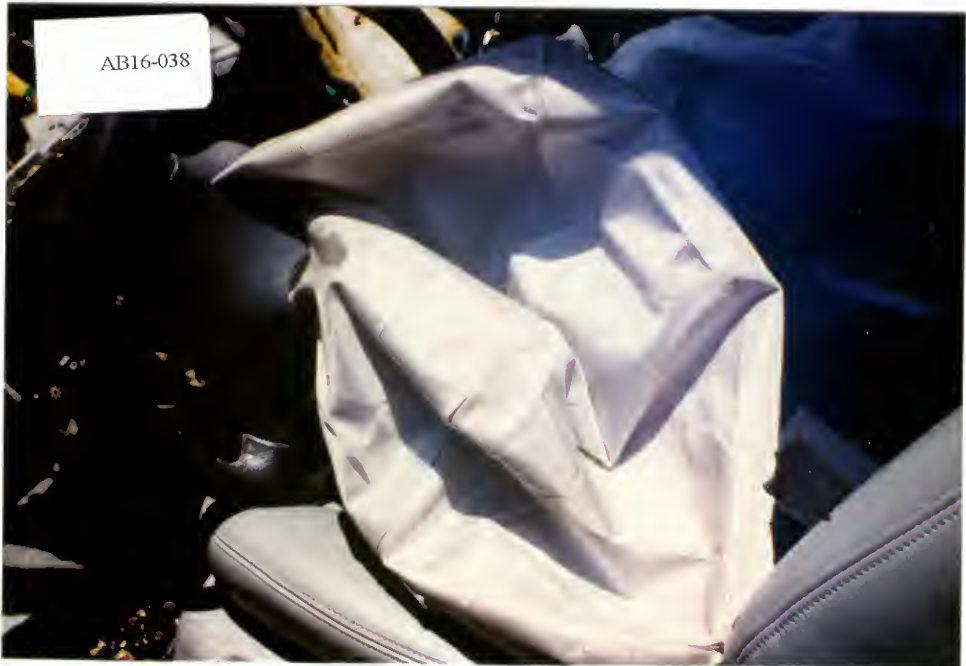


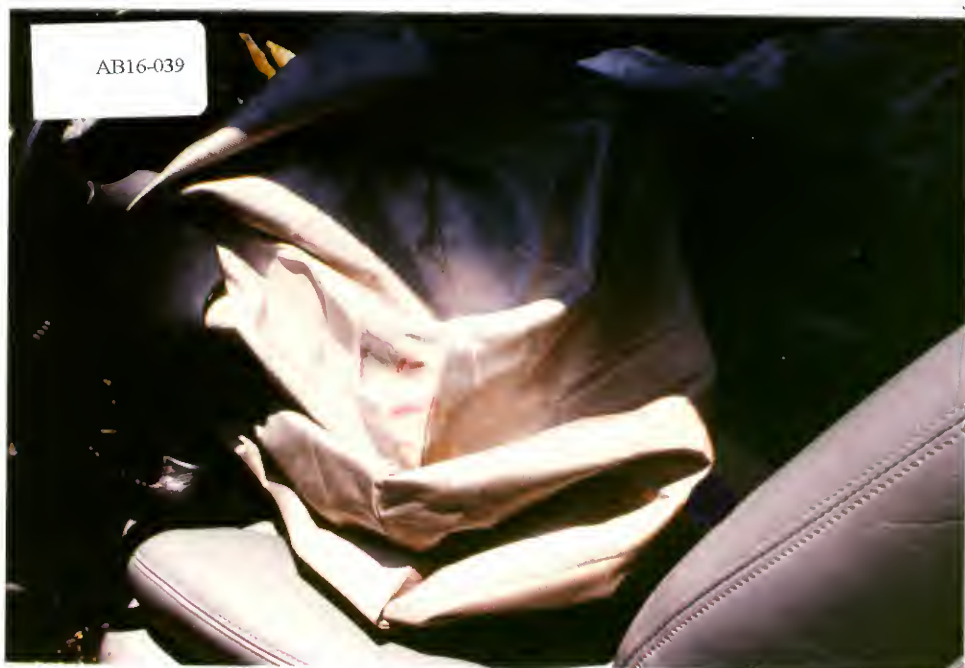


















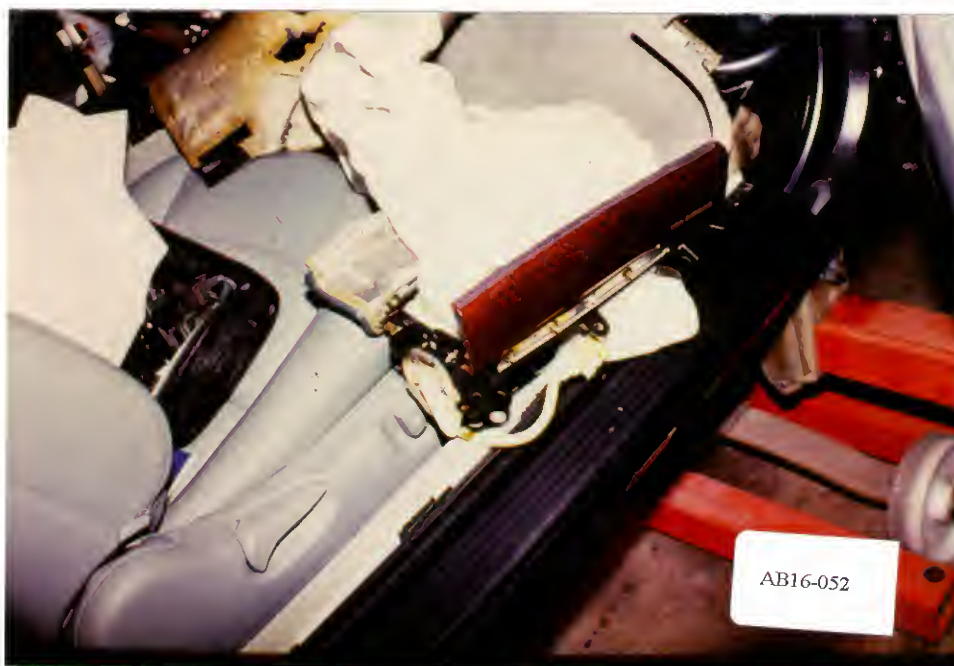




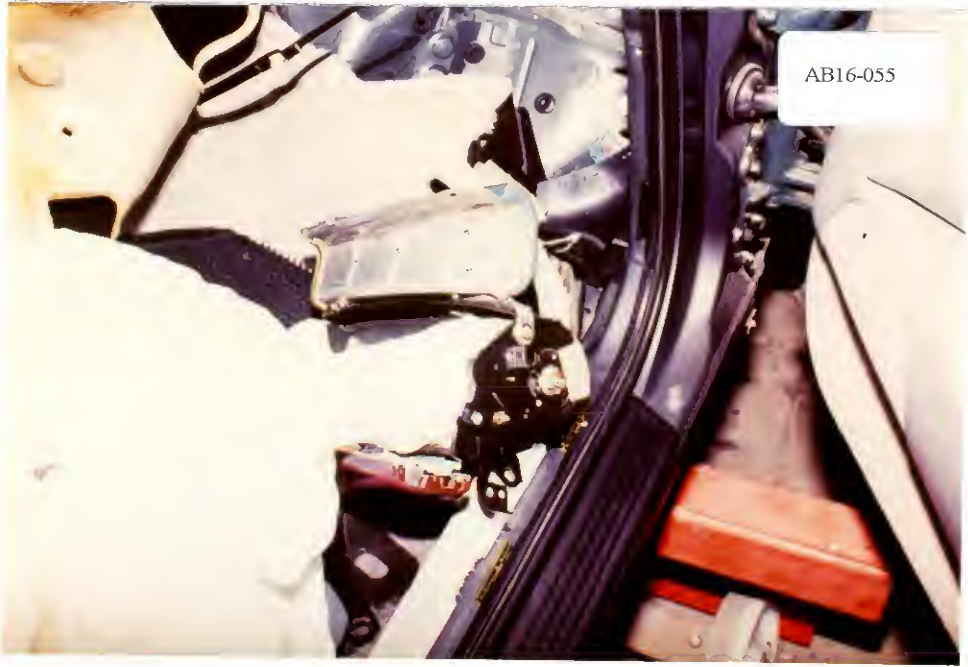
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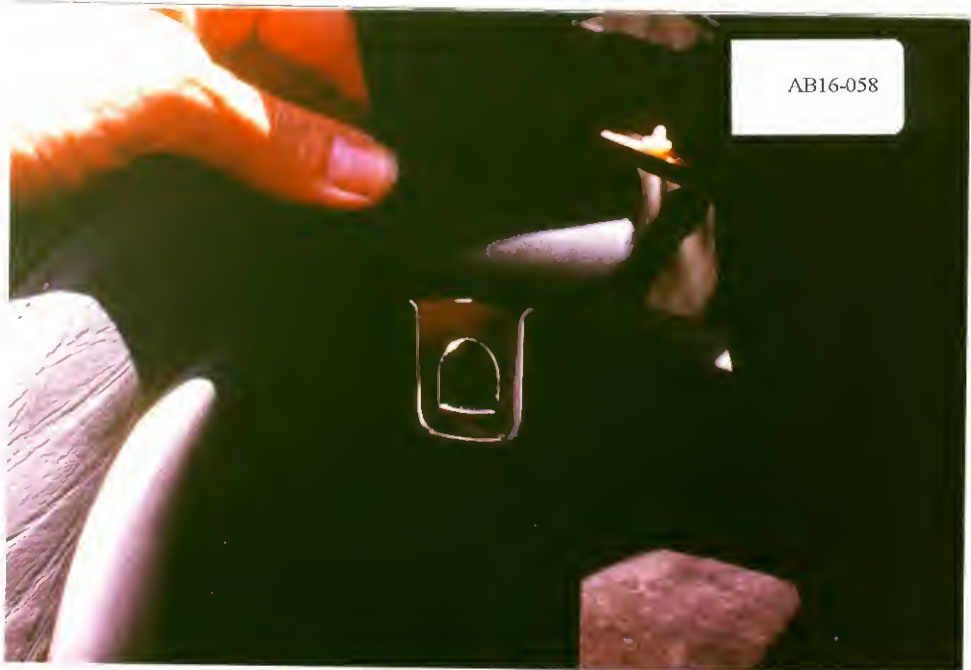


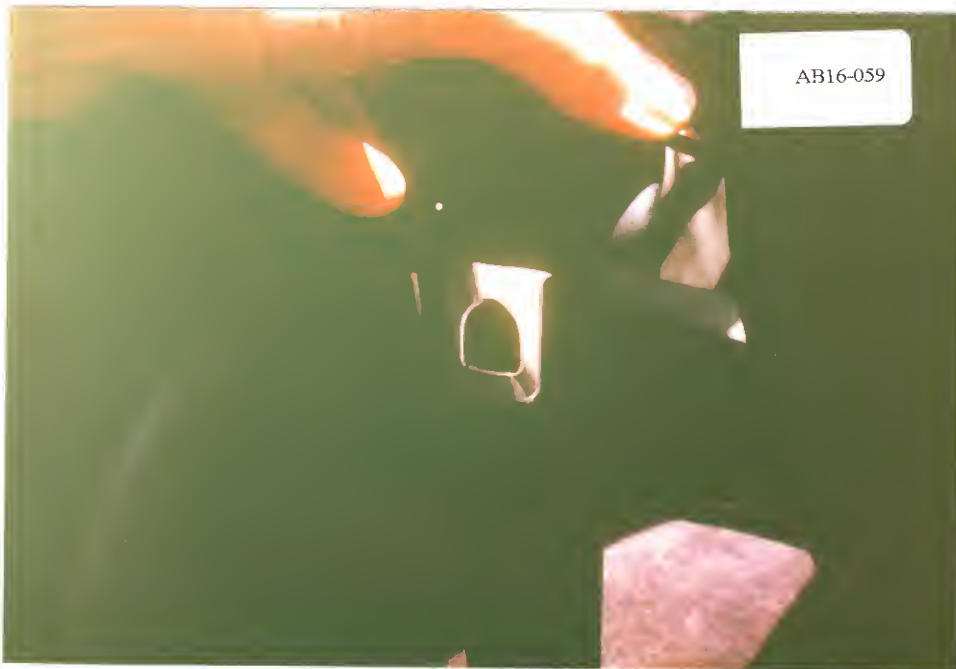
AB16-050

















DSI-94-AB-16-66



DSI-94-AB-16-67



DSI-94-AB-16-68



DSI-94-AB-16-69

SLIDE INDEX

Case No. DSI-94-AB-016

SLIDE NO.	VEHICLE NO.	ORIENTATION	SUBJECT MATTER
1-2	1 and 2	East	Direction of travel
3	1 and 2	East	Area of impact
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58-59	1		Seat belt buckle scratching
60-63	1		Driver injuries, photographs provided by driver
64-65	1		Driver eye injuries, photographs provided by doctor
66-69	1		Airbag photographs provided by body shop

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SLIDE #64,65

If you would like a copy of these photographs and/or images please write to:

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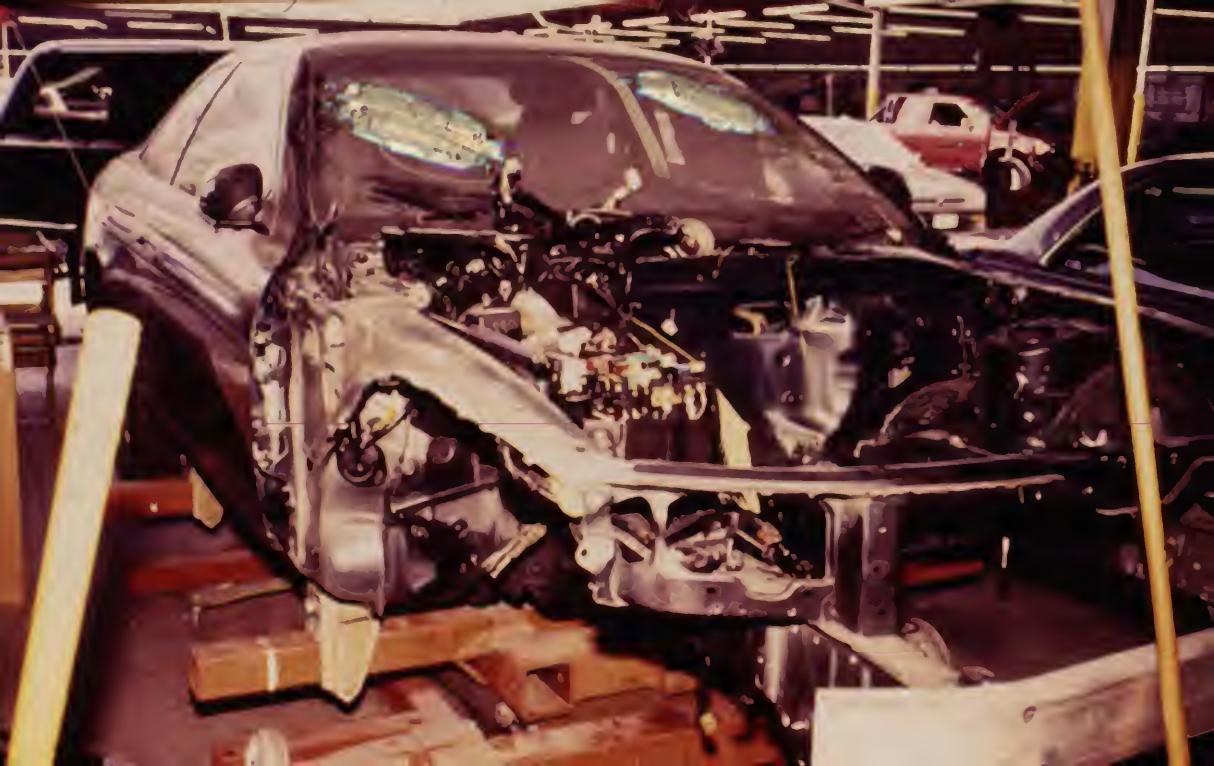


















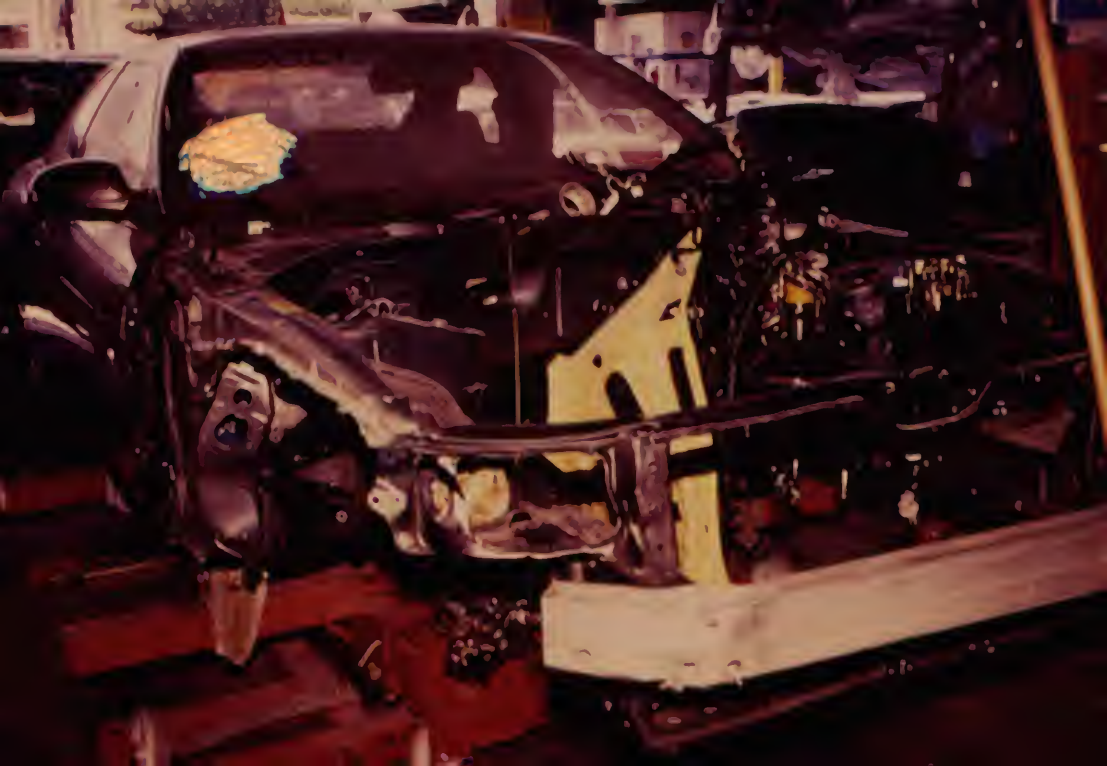


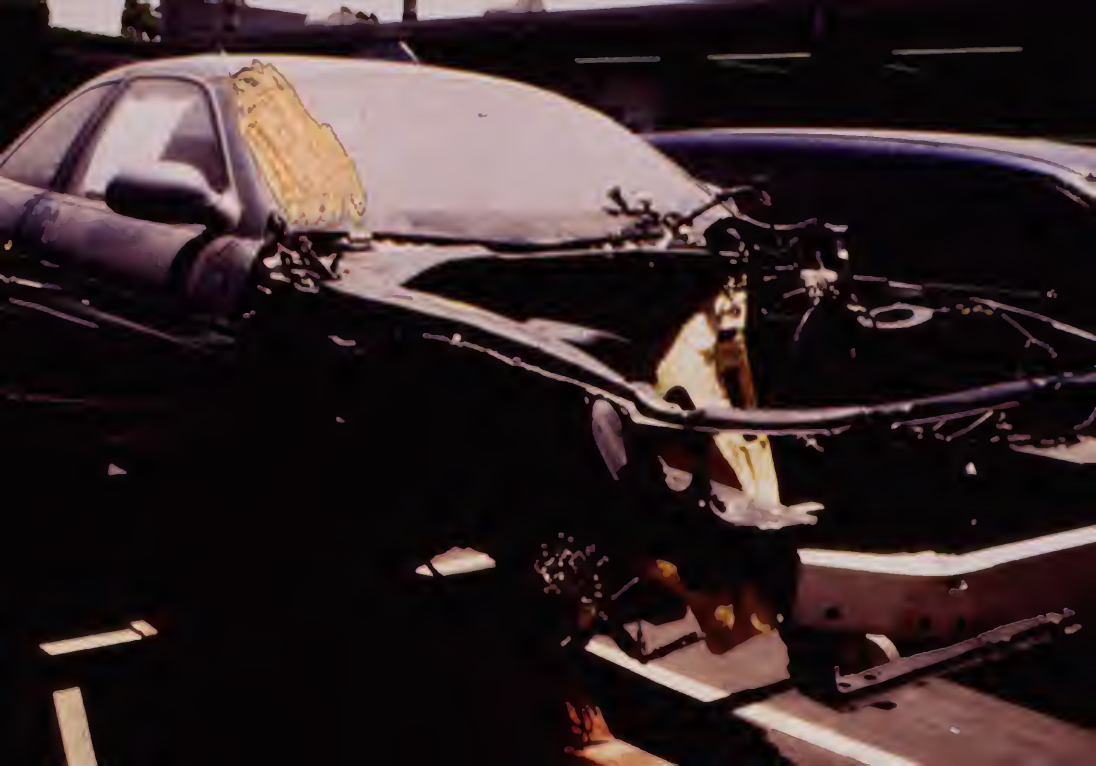










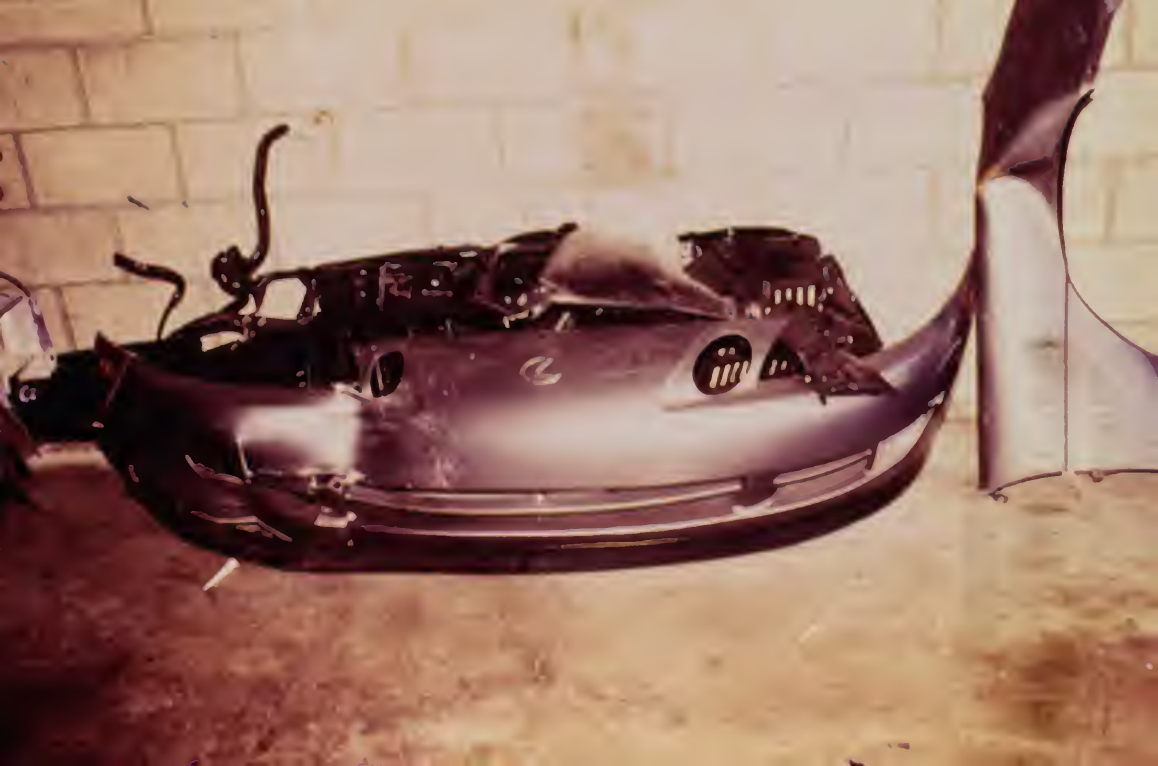












































































MANUFACTURE
CASE NUMBER
YEAR

DYNAMIC SCIENCE
DS 9416
1994

SLIDES

THE FOLLOWING SLIDE(S) ARE NOT INCLUDED IN THIS CASE:

SLIDE NUMBER(S) 66-69

National Highway Traffic Safety
Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-94-AB-16

IDENTIFICATION

3. Number of General Vehicle
Forms Submitted

02

4. Date of Accident

(Month, Day, Year) SUMMER / WEEKDAY 9 4

5. Time of Accident

EVENING

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that
has been completed; code 1 for the checked special
studies and 0 for the special studies not checked.

6. SS15 Administrative Use

0

7. SS16 Pedestrian Crash Data Study

0

8. SS17 Impact Fires

0

9. SS18

0

10. SS19

0

NUMBER OF EVENTS

11. Number of Recorded Events
in This Accident

02

Code the number of events which occurred
in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other
involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. 0 1	13. 01	14. 03	15. F	16. 02	17. 03	18. B
19. 0 2	20. 01	21. 03	22. F	23. 56	24. 00	25. 0
26. 0 3	27.	28.	29. .	30.	31.	32.
33. 0 4	34.	35.	36.	37.	38.	39.
40. 0 5	41.	42.	43.	44.	45.	46.

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo
area (rear of trailer or
straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in
diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)
(specify): guardrail

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

National Highway Traffic Safety
Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

DSI-94-AB-16

2. Case Number - Stratum

3. Vehicle Number

01

VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year
(99) Unknown

93

5. Vehicle Make (specify):

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

Lexus

59

6. Vehicle Model (specify):

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

SC-400 033

7. Body Type

Note: Applicable codes may be found on
the back of this page.

02

8. Vehicle Identification Number

JT8U730C8P0XXXXXX

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

1

10. Police Reported Travel Speed

Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown

999

___ mph X 1.6093 = ___ kph

11. Police Reported Alcohol Presence

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

1

Note: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

96

Source: police report

ACCIDENT RELATED

13. Speed Limit

(000) No statutory limit
Code posted or statutory speed limit
in kph
(999) Unknown

072

45 mph X 1.6093 = 072 kph

contrary
to
police report
08

14. Attempted Avoidance Maneuver

(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type

Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

20

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

BEST AVAILABLE COPY

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____
- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Larado, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
(0) Driver not present
(1) Driver present
(9) Unknown
17. Number of Occupants This Vehicle 02
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

18. Number of Occupant Forms Submitted 02

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1630
Code weight to nearest 10 kilograms.
(045) Less than 450 kilograms
(610) 6,100 kilograms or more
(999) Unknown
3597 lbs X .4536 = 1631.5 kgs
Source: [REDACTED]

20. Vehicle Cargo Weight 0000
Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(450) 4,500 kilograms or more
(999) Unknown

_____._____._____. lbs X .4536 = _____._____._____. kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
(0) No
(1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted < 45 degrees
(4) Tilted ≥ 45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify): _____
(9) Unknown

24. Rollover 0
(0) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)

- (1) Rollover, 1 quarter turn only
(2) Rollover, 2 quarter turns
(3) Rollover, 3 quarter turns
(4) Rollover, 4 or more quarter turns (specify): _____

(5) Rollover--end-over-end (i.e., primarily about the lateral axis)

(9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0

26. Rear Override/Underride (this Vehicle) 0

(0) No override/underride, or not an end-to-end impact

Override (see specific CDC)

- (1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify): _____

Underride (see specific CDC)

- (4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify): _____

(7) Medium/heavy truck or bus override

(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle 085

28. Heading Angle For Other Vehicle 090

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	20 STOPPED 21, 22, 23	22 SLOWER 24, 25, 27	26 DECEL. 28, 30, 31	29 SPECIFICS OTHER	30 SPECIFICS UNKNOWN
	E. Forward Impact	34 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	38 AVOID COLLISION WITH VEH.	40 AVOID COLLISION WITH OBJECT	41 SPECIFICS OTHER SPECIFICS UNKNOWN
	F. Sideswipe Angle	44 SPECIFICS OTHER	46 SPECIFICS UNKNOWN	45 SPECIFICS OTHER	47 SPECIFICS UNKNOWN	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-On	50 LATERAL MOVE	51 SPECIFICS OTHER	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN	
	H. Forward Impact	54 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	58 AVOID COLLISION WITH VEH.	60 AVOID COLLISION WITH OBJECT	61 SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle	64 LATERAL MOVE	65 SPECIFICS OTHER	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN	
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	69 INITIAL SAME DIRECTIONS	70 SPECIFICS OTHER	71 SPECIFICS UNKNOWN	(EACH • 74) (EACH • 75)
	K. Turn Into Path	76 TURN INTO SAME DIRECTION	77 TURN INTO OPPOSITE DIRECTIONS	78 SPECIFICS OTHER	79 SPECIFICS UNKNOWN	(EACH • 84) (EACH • 85)
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	86 SPECIFICS OTHER	87 SPECIFICS UNKNOWN	88 SPECIFICS OTHER	89 SPECIFICS UNKNOWN	(EACH • 90) SPECIFICS OTHER (EACH • 91) SPECIFICS UNKNOWN
VI. Miscellaneous	M. Backing Etc.	92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V30. Total Delta V 999 Highest

____ Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of Delta V + 999

____ Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

32. Lateral Component of Delta V + 999 Highest

____ Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

33. Energy Absorption 999.9 00

____ Nearest 100 joules (highest)

____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program Results (For Highest Delta V) 0

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection 1

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify): _____

36. Is this an AOPS Vehicle? 1

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drug(s) present
- (1) Yes [other drug(s) present]
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object _____

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object _____

- (98) Other event (specify): _____

- (99) Unknown event or object _____

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify):
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type (specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

PRECRASH DATA (Continued)**65. Critical Precrash Event**50*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

For Corrective Actions Attempted see variable GV14
(Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver1

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

National Highway Traffic Safety
Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 2. Case Number - Stratum	3. Vehicle Number
DSI-94-AB-16	01

VEHICLE IDENTIFICATION

VIN	JT8UZ30C8P0	Model Year	93
Vehicle Make (specify):	lexus	Vehicle Model (specify):	SC 400

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	Front right	All Front

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	± D
		Width (CDC)	Max Crush								
1	Front Rt	62.9	Zone 1	CDC Data only							
2	Front left	21.6	Zone 1	-CDC Data Only.							

ORIGINAL SPECIFICATIONS WORK SHEET

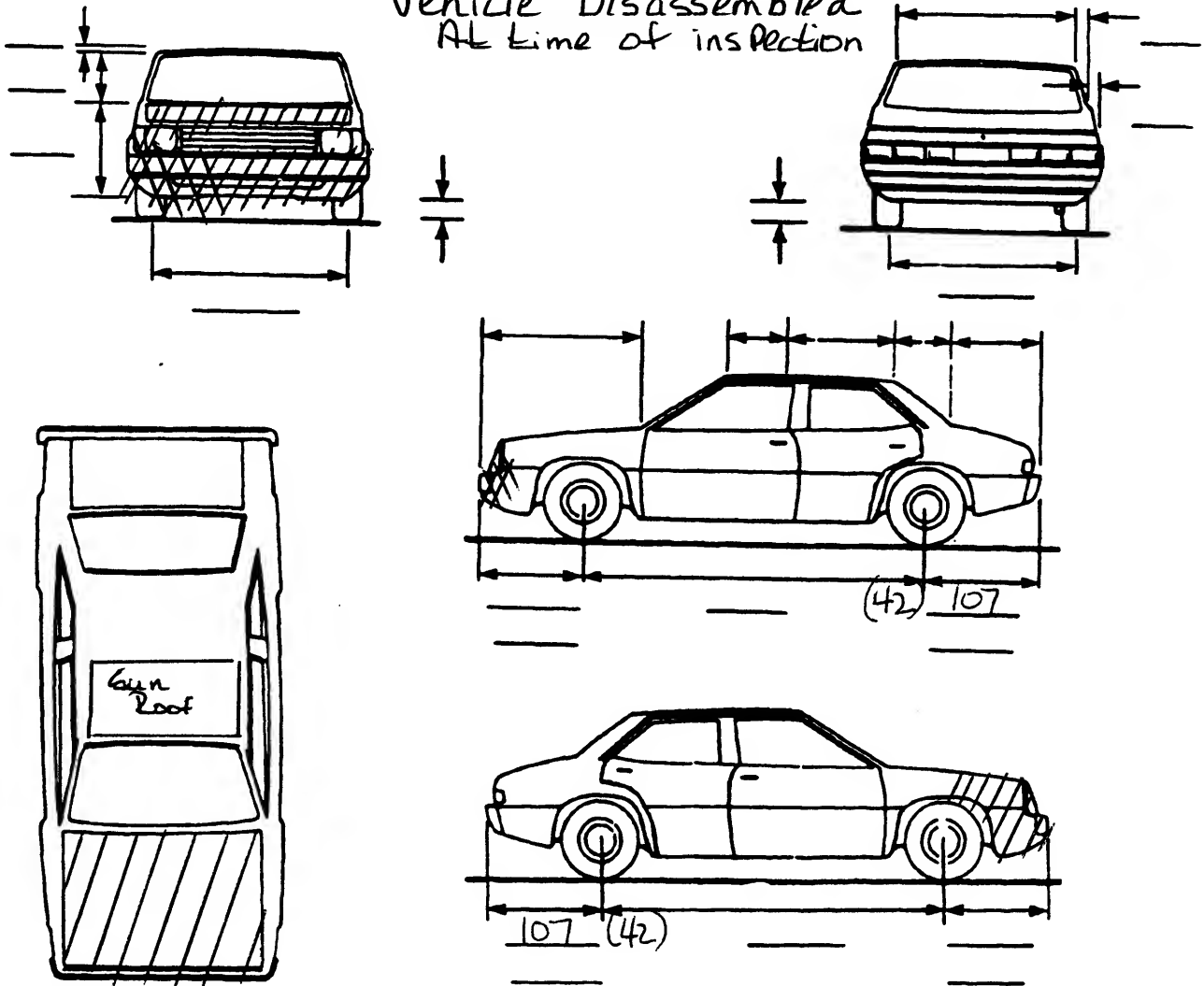
Wheelbase	<u>105.9</u>	inches	x 2.54	=	<u>268.9</u>	cm
Overall Length	<u>191.3</u>	inches	x 2.54	=	<u>485.9</u>	cm
Maximum Width	<u>70.5</u>	inches	x 2.54	=	<u>179</u>	cm
Curb Weight	<u>3597</u>	pounds	x .4536	=	<u>1631.9</u>	kg
Average Track	<u>59.8-60</u>	inches	x 2.54	=	<u>152</u>	cm
Front Overhang	<u>40.2</u>	inches	x 2.54	=	<u>102</u>	cm
Rear Overhang	<u>46.1</u>	inches	x 2.54	=	<u>117</u>	cm
Undeformed End Width	<u>N/A</u>	inches	x 2.54	=	<u>N/A</u>	cm
Engine Size: cyl./displ.	<u>4</u> <u>Ø</u> <u>Ø</u> <u>Ø</u>	cc	x .001	=	<u>4.0</u>	L
	<u>245</u>	CID	x .0164	=	<u>4.0</u>	L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF <u>9</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		ORIGINAL SPECIFICATIONS Wheelbase <u>269</u> cm Overall Length <u>486</u> cm Maximum Width <u>179</u> cm Curb Weight <u>1632</u> kg Average Track <u>152</u> cm Front Overhang <u>102</u> cm Rear Overhang <u>117</u> cm Undeformed End Width <u>N/A</u> cm Engine Size: cyl./displ. <u>4.0</u> L		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF \pm <u>0</u> ° LF \pm <u> </u> ° RR \pm <u> </u> ° LR \pm <u> </u> ° Within \pm 5 degrees
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		
		Approximate Cargo Weight <u>UNK</u> kg		

MEASUREMENTS IN CENTIMETERS

Vehicle Disassembled
At time of inspection



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover
 (32) Fire or explosion
 (33) Jackknife
 (34) Other intraunit damage (specify):

- (35) Noncollision injury
 (38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
 (42) Tree (> 10 cm in diameter)
 (43) Shrubbery or bush
 (44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
 (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
 (52) Pole or post (> 30 cm in diameter)
 (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
 (55) Impact attenuator
 (56) Other traffic barrier (includes guardrail)
 (specify): guardrail

- (57) Fence
 (58) Wall
 (59) Building
 (60) Ditch or culvert
 (61) Ground
 (62) Fire hydrant
 (63) Curb
 (64) Bridge
 (68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
 (72) Pedestrian
 (73) Cyclist or cycle
 (74) Other nonmotorist or conveyance

- (75) Vehicle occupant
 (76) Animal
 (77) Train
 (78) Trailer, disconnected in transport
 (79) Object fell from vehicle in-transport
 (88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	005	00	F	Z	E	W	01
02	56	000	00	F	L	L	S	01
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>12</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>01</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>56</u>	14. <u>12</u>	15. <u>F</u>	16. <u>L</u>	17. <u>L</u>	18. <u>S</u>	19. <u>01</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>± D</u>
"CDC ONLY"							+
							-

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>± D</u>
"CDC ONLY"							+
							-

26. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 269
Code to the nearest centimeter
(999) Unknown

105.9 inches X 2.54 = 269 centimeters

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

- (9) Unknown if vehicle is modified

30. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

31. Origin of Fire

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

- (9) Unknown

32. Type of Fuel Tank-1

33. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

34. Fuel Tank-1 Location

35. Fuel Tank-2 Location

- (0) No fuel tank
(1) Aft of center of the rear wheels (rear axle)
centered
(2) Aft of center of the rear wheels (rear axle) left
side
(3) Aft of center of the rear wheels (rear axle)
right side
(4) Forward of center of the rear wheels (rear
axle) centered
(5) Forward of center of the rear wheels (rear
axle) left side
(6) Forward of center of the rear wheels (rear
axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

36. Fuel Tank-1 Filler Cap Location

37. Fuel Tank-2 Filler Cap Location

- (0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on
left side plane
(3) Aft of center of the rear wheels (rear axle) on
right side plane
(4) Forward of center of the rear wheels (rear
axle) on left side plane
(5) Forward of center of the rear wheels (rear
axle) on right side plane
(6) Over the center of the rear wheels (rear axle)
on left side plane
(7) Over the center of the rear wheels (rear axle)
on right side plane
(8) Other (specify): _____
(9) Unknown

38. Fuel Tank-1 Damage

39. Fuel Tank-2 Damage

- (0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

- $$\begin{array}{r} 01 \\ \hline 06 \end{array}$$

- Q

-
- This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page.

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

DSI-94 AB-16

01

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 0 16. LF 0 17. RF 0 18. LR 0 19. RR 0
20. BL 0 21. Roof 0 22. Other 8

- (0) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (8) No glazing
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 1 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

- (0) No occupant contact to glazing or no glazing
- (1) Glazing contacted by occupant but no glazing damage
- (2) Glazing in place and cracked by occupant contact
- (3) Glazing in place and holed by occupant contact
- (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (5) Glazing out-of-place by occupant contact and holed by occupant contact
- (6) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 0 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

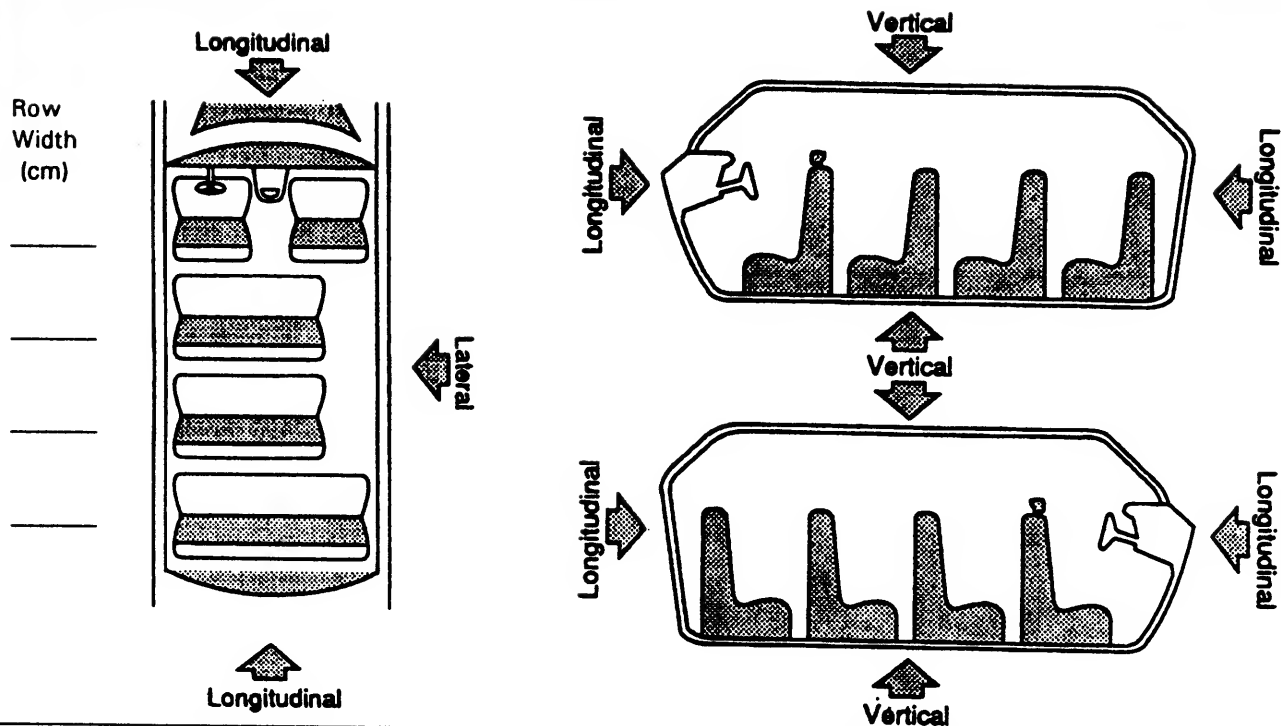
- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 — Laminated
- (2) AS-2 — Tempered
- (3) AS-3 — Tempered-tinted
- (4) AS-14 — Glass/Plastic
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 0 41. RF 0 42. LR 0 43. RR 0
44. BL 0 45. Roof 0 46. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown

[illegible]

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

None

- Front Seat
- (11) Left
 - (12) Middle
 - (13) Right

- Fourth Seat
- (41) Left
 - (42) Middle
 - (43) Right

- Second Seat
- (21) Left
 - (22) Middle
 - (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____

(99) Unknown

- Third Seat
- (31) Left
 - (32) Middle
 - (33) Right

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

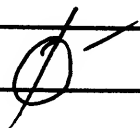
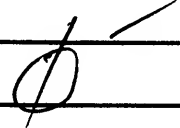
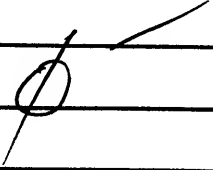



DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
	—		=	
	—		=	
	—		=	
	—		=	

STEERING COLUMN**87. Steering Column Type**

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

2**88. Blank**

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X**89. Blank**

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X**90. Blank**

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X**91. Blank**

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X**92. Steering Rim/Spoke Deformation**

Code actual measured deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

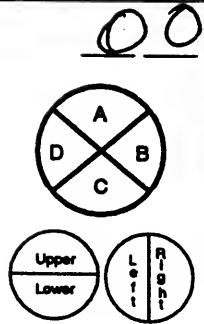
00**93. Location of Steering Rim/Spoke Deformation****Quarter Sections**

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

Half Sections

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke

- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

**INSTRUMENT PANEL****94. Odometer Reading**999,000

_____ kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown

_____ miles X 1.6093 = _____ kilometers

Source: Vehicle Dash
Removed

95. Instrument Panel Damage from Occupant Contact?

- (0) No
 (1) Yes
 (9) Unknown

9**96. Knee Bolsters Deformed from Occupant Contact?**

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

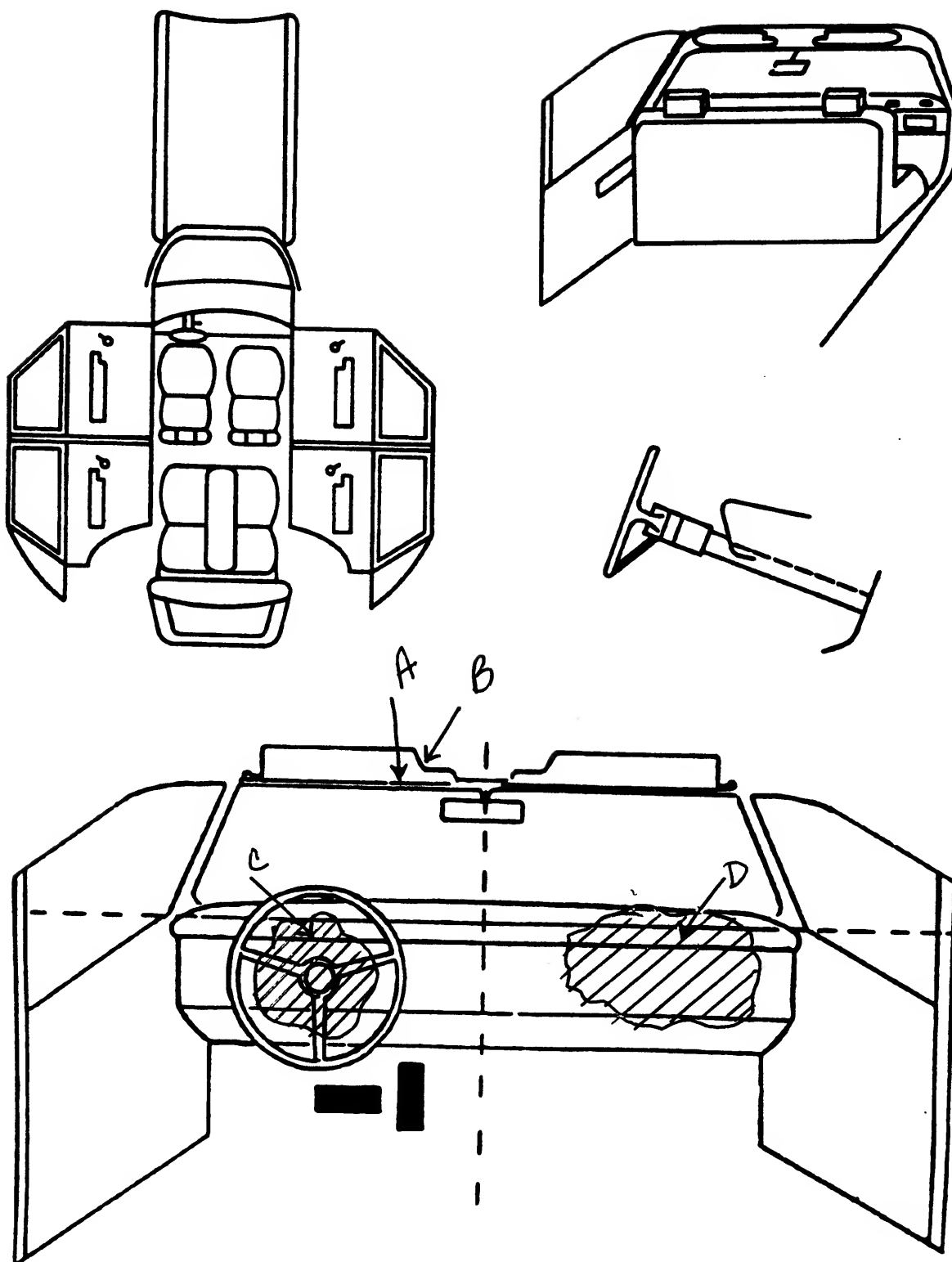
9**97. Did Glove Compartment Door Open During Collision(s)?**

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

9

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	03	01	forehead	depressed/oil transfer	1
B	14	01	forehead	hair	1
C	45	01	face	make up transfers	1
D	45	02	face	Deployed	1
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar

- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A (A1/A2)-pillar

- (33) Right B-pillar

- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): _____

- (44) Head restraint system

- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): _____

- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
F I R S T	Availability/Function	/	/
	Deployment	/	/
	Failure	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	/	/
	Use	/	/
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other automatic belt failure (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	0	4
	Evidence of usage	04	0	04
	Used in this crash?	NO	00	99
	Proper Use	0	0	9
	Failure Modes	0	0	9
SECOND	Availability	4	3	4
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used - type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat - type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model						

Specify Below for Each Child Safety Seat

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	00	02
	Seat Performance	1	0	1
	Seat Orientation	1	0	1
SECOND	Head Restraint Type/Damage	1	0	1
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown _____

Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type)

(99) Unknown

Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown _____

Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown _____

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area

- (1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

- (9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

- (9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [☒] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

DSI-94-AB-16

01

01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

67 inches X 2.54 = 170 centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

150 pounds X .4536 = 68 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 7

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): 3pt and air bag Deployment
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown _____

26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model

000

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat

0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation

00

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage

00

32. Child Safety Seat Shield Usage

00

33. Child Safety Seat Tether Usage

00Note: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 06

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 06

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

Doing her
work at
home

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 11

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/Function** Q

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use Q

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type Q

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System Q

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident Q

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
- [x] Vehicle inspection
- [] Official injury data
- [] Driver/occupant interview
- [] Other (specify): _____

[] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED
WITH INITIAL SUBMISSION?

NO [] YES [X]

UPDATE CANDIDATE?

NO [X] YES []

STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 02
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

51. Was the Occupant Given Blood? 1
(1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 01
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported, HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 1
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): _____
(9) Unknown if belt used



U.S. Department of Transportation
National Highway Traffic Safety
Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number DSI-94-ABTK	Interviewee(s) Role or Name(s): Driver's
2. Case Number - Stratum	husband
3. Vehicle Number 01	

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

They need to put 1/2" foam rubber on the bag itself. maybe 8" by 8" on the part that comes and hits on face. It would absolute injury. The air bags hit like a boxing glove.

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

ACCIDENT DIAGRAM



NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

 V_1

Braked and
steered to
left to avoid

 V_2



U.S. Department of Transportation
National Highway Traffic Safety
Administration

INTERVIEW FORM (B)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number DSI 94-AB-16
2. Case Number - Stratum _____
3. Vehicle Number _____

Interviewee(s) Role or Name(s): Driver
and husband

ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

☐ North ☐ South ☒ East ☐ West

(Optional - Where were you coming from or going to?

2. In which lane were you traveling?

(Note: Lane 1 is designated as the right curb lane.)

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ Other (specify): _____

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

☐ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

☒ Going straight ☐ Stopped
☐ slowing ☐ Accelerating
☐ Turning left ☐ Turning right
☐ Changing lanes to left ☐ Changing lanes to right
☐ Backing
☐ Other (specify): _____

5. Did you experience any loss of control due to weather conditions or mechanical problems?

☒ No
☐ Yes (If yes, describe below)

6. Did you have to take any avoidance actions prior to the accident?

☐ No - Go to question 7
☒ Yes - Go to question 6a

- 6a. What actions did you take?

☐ Braking with lock-up
☒ Braking without lock-up
☐ Releasing brakes
☐ Accelerating
☒ Steering left
☐ Steering right
☐ Other (specify): _____

7. Where was your vehicle at the time of the collision?

☒ Original travel lane ☐ Different travel lane
☐ In intersection ☐ Off roadway to right
☐ Off roadway to left
☐ Other (specify): _____

8. Was your travel speed at the time of the collision different from your previous travel speed?

☐ No
☒ Lower
☐ Higher
☐ Unknown

- 8a. Can you estimate your speed at the time of the collision?

☐ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

DSI-94-AB-16

4. Occupant Number

VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?

1 9 93. Lexus SC400
 Year Make Model

2. Can you describe the damage to your vehicle?

Front right

3. Was there any previous damage to your vehicle that is not related to this accident?

☒ No
☐ Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?

☒ No
☐ Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?

☒ No
☐ Yes (If "Yes", describe below)

6. Does your vehicle have a glove compartment?

☐ No
☒ Yes

6a. Did the glove compartment door come open during the accident?

☒ No
☐ Yes
☐ Unknown

7. Does your vehicle have "seat belts"?

☐ No (If "No", go to question 7b)
☒ Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Front seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Front seat right	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Rear seat left	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Rear seat middle	<input checked="" type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat right	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder

(Identify seat belts for third row and beyond)

7b. Were any of the belts removed or not functional prior to the accident?

☒ No
☐ Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?

☒ No (If "No", go to question 9)
☐ Yes (If "Yes", what seat location?)
☐ Left Front
☐ Right Front

8a. Were the motorized belts working properly before the accident?

☐ No (If "No", describe condition below)
☐ Yes

8b. Were the belts connected to the track prior to the accident?

☐ No
☐ Yes
☐ Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

☐ No (go to question 10)
☐ Yes

9a. Does this belt come across the _____?

☐ Chest only
☒ Lap and chest

9b. Was this belt connected prior to the accident?

☐ No
☒ Yes
☐ Unknown

AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?

☐ No (go to question 11)
☒ Yes (go to question 10a)
☐ Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

☐ No (go to questions 10b and 10c)
☒ Yes (go to question 10e)

1. Primary Sampling Unit Number

DSI-94-AB16

3. Vehicle Number

01

2. Case Number - Stratum

4. Occupant Number

01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?

- ☒ No
☐ Yes (If "Yes", describe previous condition)

☐ Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?

- ☒ No (go to question 11)
☐ Yes (go to question 10d)
☐ Unknown

10d. Was the air bag re-installed after the accident?

- ☐ No (go to question 11)
☐ Yes
☐ Unknown

10e. Did the air bag inflate as you expected?

- ☐ No (If "No" describe below)

☐ Yes
☐ Unknown

11. Is your vehicle equipped with a passenger side air bag?

- ☐ No (If "No", go to question 12)
☒ Yes (If "Yes", go to question 11a)
☐ Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?

- ☐ No (go to question 11b)
☒ Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?

- ☒ No
☐ Yes (If "Yes", describe below)

☐ Unknown

11c. Was the passenger air bag inflated in a previous accident?

- ☒ No (go to question 12)
☐ Yes (go to question 11d)
☐ Unknown

11d. Was the passenger air bag re-installed after the accident?

- ☐ No (go to question 12)
☐ Yes
☐ Unknown

11e. Did the passenger air bag inflate as you expected?

- ☐ No (If "No" describe below)

☐ Yes
☐ Unknown

CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?

- ☒ No (If "No", go to question 13)
☐ Yes
☐ Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?

12b. Can you describe the type of child safety seat?

- ☐ Infant
☐ Toddler
☐ Convertible
☐ Booster
☐ Other (specify):
☐ Unknown

12c. Where was the child safety seat(s) located?

- [12] [13]
[21] [22] [23]
[31] [32] [33]
[Other] (specify):

12d. Can you tell me which direction the child safety seat was facing prior to the accident?

- ☐ Rear facing
☐ Forward facing
☐ Other (specify):
☐ Unknown

12e. Was a seat belt used to hold the child seat in place?

- ☐ No (If "No", go to question 12g)
☐ Yes (If "Yes", go to question 12f)
☐ Unknown

12f. Can you describe how the seat belt was secured to the child seat?

- ☐ Looped through designated rear framing struts?
☐ Looped through arm rest slots?
☐ Belt across safety shield?
☐ Looped through rear frame outside the designated framing struts?
☐ Other (specify):
☐ Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)

- ☐ Harness
☐ Shield
☐ Tether strap

If any box is checked, ask questions 12h - 12i.

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?

- ☐ Yes
(specify _____)
☐ No
☐ Unknown

12i. Were any of these items used during the accident?

- ☐ Yes (If "Yes", check all that apply)
☐ Harness
☐ Shield
☐ Tether strap
☐ No
☐ Unknown

CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?

- ☐ No (If "No", go to question 14)
☐ Yes (If "Yes", go to question 13a)
☐ Unknown

13a. Can you estimate the weight of the cargo?

_____ lbs.

Cargo description

14. Can you tell me the mileage on the vehicle?

_____ miles

OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

16. May I take a look at your vehicle to assess the damage?

- ☐ No
☐ Yes

DRIVER ONLY

17. What race do you consider yourself?

- ☐ White
☒ Black
☐ American Indian, Eskimo or Aleut, Asian or Pacific Islander
☐ Other (specify: _____)
☐ Unknown.

18. Are you of hispanic origin?

- ☐ No
☐ Yes

per doctor's reports

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

VEHICLE ROLLOVER/FIRE QUESTIONS

ROLLOVER QUESTIONS

1. Did the vehicle rollover during the accident?

☒ No (If "No", go to question 2.)☐ Yes☐ Unknown (skip to question 2)

1a. Describe where the rollover began.

☐ On roadway☐ On shoulder☐ On roadside or median☐ Unknown

1b. What caused the vehicle to rollover?

☐ Other vehicle (specify vehicle number): _____☐ Contacted object (specify): _____☐ Other cause (specify): _____☐ Unknown

1c. Describe which direction the vehicle rolled.

☐ Toward the right☐ Toward the left☐ End-over-end☐ Unknown

1d. Estimate the number of sides (including the top and bottom) which contacted the ground during the rollover?

☐ 1 side☐ 2 sides☐ 3 sides☐ 4 sides☐ Unknown

1e. Did the vehicle roll over more than one complete turn (more than 4 sides)?

☐ No (If "No", go to question 1g.)☐ Yes

1f. Estimate the number of complete turns.

☐ No☐ Yes (specify): _____☐ Unknown

1g. When the vehicle stopped rolling over, which side of the vehicle was in contact with the ground?

☐ Left side☐ Right side☐ Top☐ Wheels☐ Unknown

FIRE QUESTIONS

2. Did the vehicle experience a fire?

☒ No (If "No", skip to Occupant Data Questions)☐ Yes☐ Unknown

2a. Describe where the fire started or where smoke was first seen.

☐ Under the hood☐ Behind the instrument panel☐ In the passenger compartment☐ In the trunk/cargo area☐ Under the vehicle☐ From other involved vehicle☐ Unknown

2b. Did the fire start with the electrical system?

☐ No☐ Yes (specify): _____☐ Unknown

2c. Did the fire start with the fuel system?

☐ No (If "No", skip to Occupant Data Questions)☐ Yes (go to question 2d)☐ Unknown

2d. Describe which part of the fuel system that may have been involved?

☐ No☐ Yes (specify): _____

____ Fuel tank

____ Fuel lines

____ Engine compartment (specify component if known)

☐ Unknown

(Go To Occupant Data Questions)

COMMENTS ON ROLLOVERS AND FIRES

1. Primary Sampling Unit Number

DSI-94-AB-16

3. Vehicle Number

01

2. Case Number - Stratum

4. Occupant Number

01

OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?

☐ No (If "No", go to question 4)☒ Yes (If "Yes", specify number in question 2 below and then go to question 3)☐ Unknown

2. How many?

☒ (1) One other person☐ (2) Two other persons☐ (3) Three other persons☐ (4) Four other persons☐ (5) Five other persons☐ (6) Six other persons☐ (7) Seven or more other persons
(specify number:)

3. Where was this person sitting? (Circle seating positions)

<input checked="" type="checkbox"/> [1]	<input type="checkbox"/> [12]	<input type="checkbox"/> [13]
<input type="checkbox"/> [21]	<input type="checkbox"/> [22]	<input type="checkbox"/> [23]
<input type="checkbox"/> [31]	<input type="checkbox"/> [32]	<input type="checkbox"/> [33]

☐ Other (specify:)

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 5'7" Weight 150 Age 57Sex: ☐ Male ☒ Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?

normal

5a. Can you describe the location of your (his/her) feet just prior to the collision?

left foot on brake

5b. Can you describe the location of your (his/her) arms?

normal

5c. Was your (his/her) back resting against the seat back rest?

☐ No (If "No", describe the position)☒ Yes☐ Unknown

5d. Were you (Was he/she)

☒ Sitting upright or☐ Leaning to left side, or☐ Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)☐ Yes (If "Yes", go to question 6a)☐ Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?

☐ No☐ Yes (Describe:)

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)☒ Yes☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?☒ Lap and Shoulder belt?☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach☒ Low on lap☐ Other (specify:)☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder☐ Under the arm☐ Behind the back☐ Behind the seat☐ Other (specify:)

7d. Did any part of the belt system break or tear?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

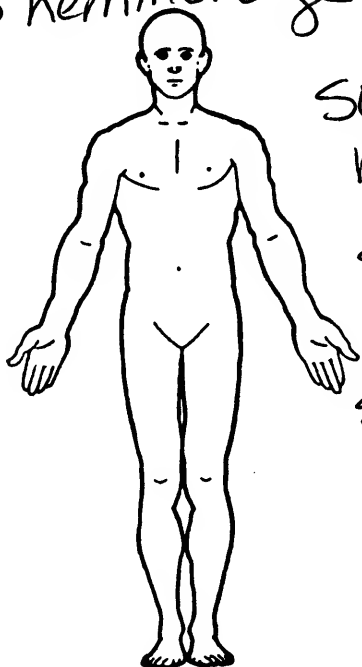
PSU Number _____ Case Number—Stratum DSI-94-AB-16 Vehicle Number 01 Occupant Number 01

INJURY DATA FROM INTERVIEWEE(S)

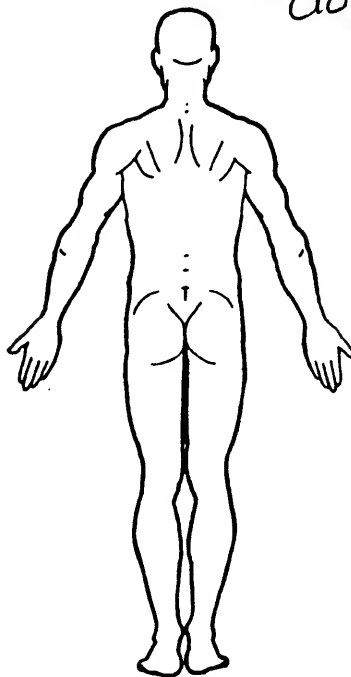
Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s):

Driver
husband,
doctor

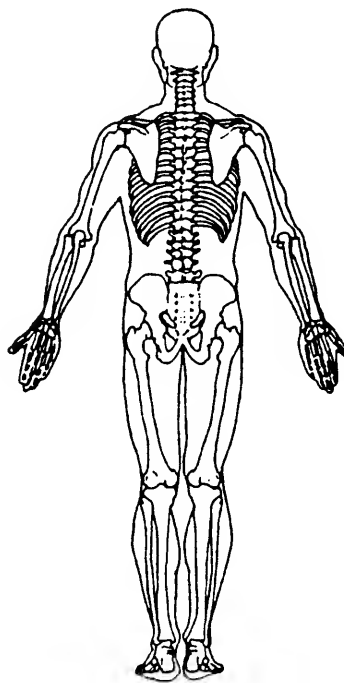
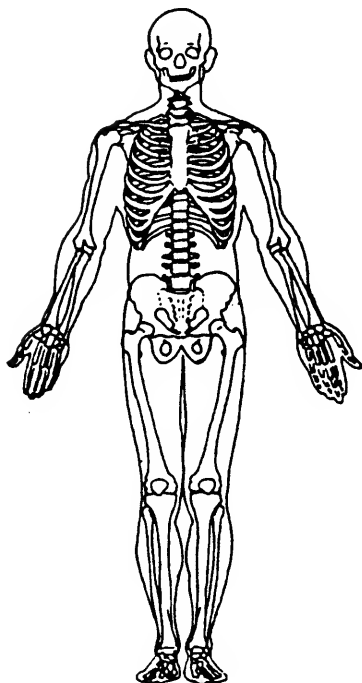
eyes hemorrhage. SOFT TISSUE/INTERNAL INJURIES



swollen
nose
scratches
on face
swollen
lip



SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?☐ No (If "No", skip to question 7)☒ Yes (If "Yes", complete Occupant Injury Questions)☐ Unknown2. Did you (he/she) receive any cuts, abrasions, or bruises?☐ No (go to question 3)☒ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

☒ No☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)☐ Unknown3. Did you (he/she) experience any broken bones?☒ No (If "No", go to question 4)☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)☐ Unknown

3a. Do you know what caused the injury(s)?

☐ No☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)☐ Unknown4. Did you (he/she) injure your (his/her) head? (skull/brain?)☐ No (If "No", go to question 5)☒ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)☐ Unknown

4a. Do you know what caused the injury(s)?

☒ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown

5. Were any of your (his/her) internal organs injured?

☒ No (If "No", go to question 6)☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)☐ Unknown

5a. Do you know what caused this injury?

☐ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown6. Did you (he/she) suffer any joint sprains or muscle strains?☒ No (If "No", go to question 7)☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)☐ Unknown

6a. Do you know what caused the injury(s)?

☐ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown7. Did you (he/she) receive any treatment?☒ No (If "No", go to question 8)☐ Yes (If "Yes", go to question 7a or return to question 2.)7a. Were you (Was he/she) treated by (check all that apply):☐ Hospital/trauma center? (specify hospital name):☐ Medical clinic☐ Out patient surgery? (specify medical facility:)☐ Paramedics or first aid at the scene?☐ A doctor in his/her office?☒ Treated at home?☐ None of the above, go to question 8.7b. Were you (Was he/she) treated and released from the emergency room?☐ No (If "No", go to question 7c.)☐ Yes (If "Yes", go to question 7e.)7c. Were you (Was he/she) hospitalized?☒ No (If "No", give an explanation)☐ Yes (If "Yes", go to question 7d.)7d. How many days were you (was he/she) in the hospital?
_____ days

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

DSI 94 AB16

4. Occupant Number

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

OCCUPANT DATA QUESTIONS SUPPLEMENT

1. Who was the next occupant in your vehicle at the time of the accident?

husband2. Occupant Number 2 of 2.

3. Where were you (was this person) sitting? (Circle seating positions)

	[12]	<u>(13)</u>
[21]	[22]	[23]
[31]	[32]	[33]

[] Other (specify:)

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 6'4" Weight 210 Age 60Sex: ☒ Male [] Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she) was sitting in the vehicle?

asleep / Abnormal

5a. Can you describe the location of your (his/her) feet just prior to the collision?

5b. Can you describe the location of your (his/her) arms?

5c. Was your (his/her) back resting against the seat back rest?

[] No (If "No", describe the position)

☒ Yes

[] Unknown

5d. Were you (Was he/she)

- [] Sitting upright or
[] Leaning to left side, or
[] Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

- ☒ No (If "No", go to question 7)
[] Yes (If "Yes", go to question 6a)
[] Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?

- [] No
[] Yes (Describe:)

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

- [] No (If "No", go to question 8)
☒ Yes
[] Unknown

7a. Were you (Was he/she) wearing the

- [] Lap belt?
☒ Lap and Shoulder belt?
[] Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

- ☒ Across the stomach
[] Low on lap
[] Other (specify:)
[] Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

- ☒ Over the shoulder
[] Under the arm
[] Behind the back
[] Behind the seat
[] Other (specify:)

7d. Did any part of the belt system break or tear?

- ☒ No
[] Yes (If "Yes", describe)
[] Unknown

OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

- ☒ No
[] Yes (If "Yes", describe)

[] Unknown

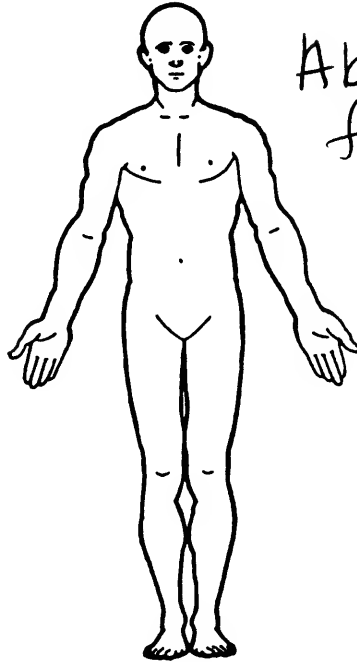
PSU Number _____ Case Number—Stratum DSI AB-16 Vehicle Number 01 Occupant Number 02

INJURY DATA FROM INTERVIEWEE(S)

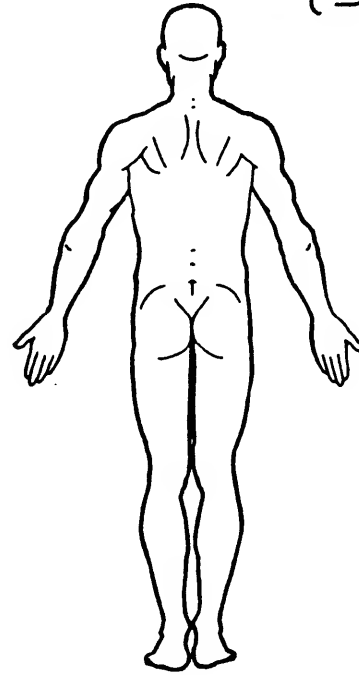
Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s):

Driver
husband
(same)

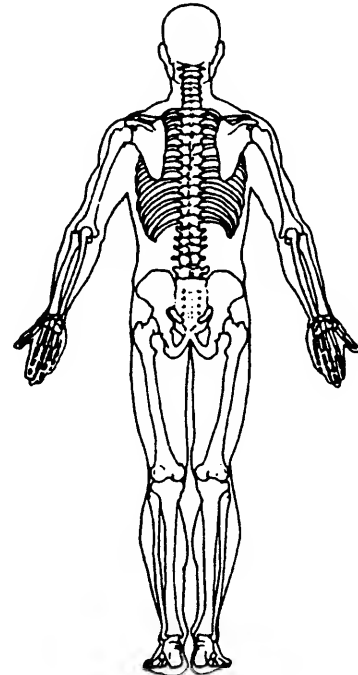
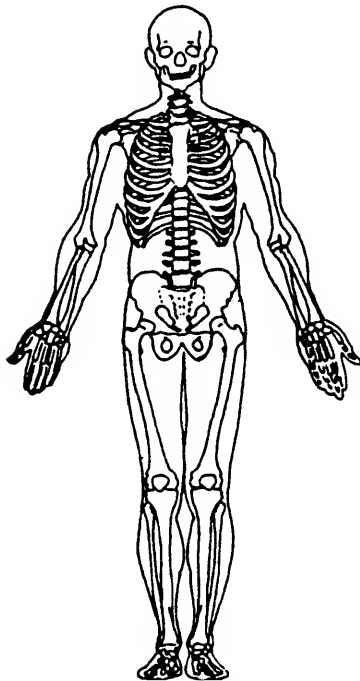
SOFT TISSUE/INTERNAL INJURIES



Abrasion to forehead

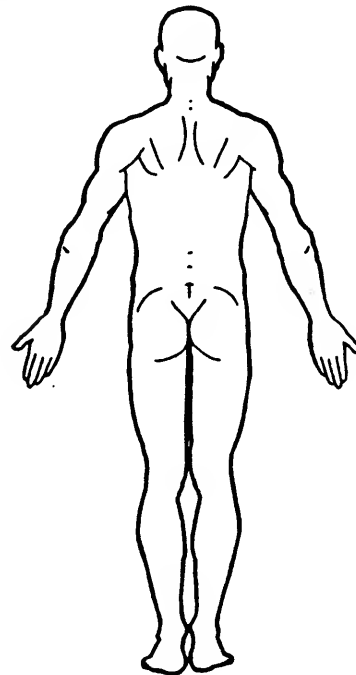
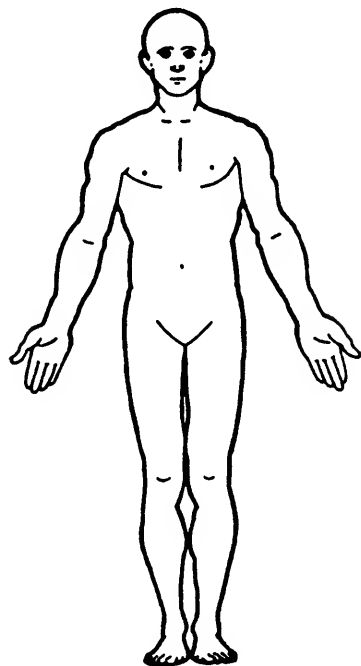
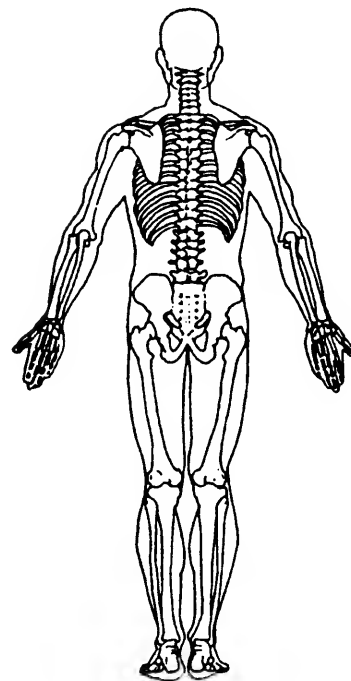
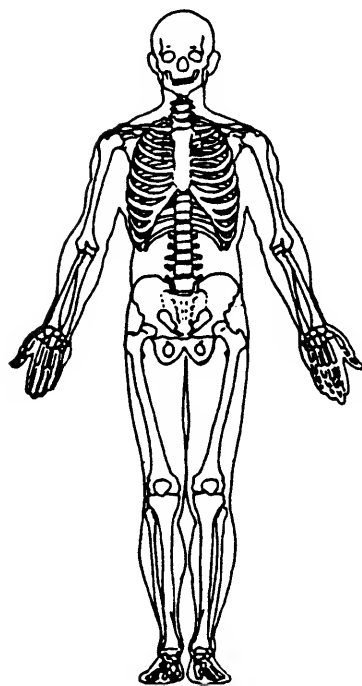


SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

PSU Number _____ Case Number—Stratum _____ Vehicle Number _____ Occupant Number _____

INJURY DATA FROM INTERVIEWEE(S)Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): _____**SOFT TISSUE/INTERNAL INJURIES****SKELETAL INJURIES**

The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

☐ No (If "No", skip to question 7)☒ Yes (If "Yes", complete Occupant Injury Questions)☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

☐ No (go to question 3)☒ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

☐ No☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)☐ Unknown

3. Did you (he/she) experience any broken bones?

☒ No (If "No", go to question 4)☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)☐ Unknown

3a. Do you know what caused the injury(s)?

☐ No☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)☐ Unknown

4. Did you (he/she) injure your (his/her) head? (skull/ brain?)

☒ No (If "No", go to question 5)☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)☐ Unknown

4a. Do you know what caused the injury(s)?

☐ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown

5. Were any of your (his/her) internal organs injured?

☒ No (If "No", go to question 6)☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)☐ Unknown

5a. Do you know what caused this injury?

☐ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

☒ No (If "No", go to question 7)☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)☐ Unknown

6a. Do you know what caused the injury(s)?

☐ No☐ Yes (If "Yes", specify the component(s) on the manikin(s).)☐ Unknown

7. Did you (he/she) receive any treatment?

☒ No (If "No", go to question 8)☐ Yes (If "Yes", go to question 7a or return to question 2.)

7a. Were you (Was he/she) treated by (check all that apply):

☐ Hospital/trauma center? (specify hospital name):☐ Medical clinic☐ Out patient surgery? (specify medical facility):☐ Paramedics or first aid at the scene?☐ A doctor in his/her office?☐ Treated at home?☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

☐ No (If "No", go to question 7c.)☐ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

☐ No (If "No", give an explanation)☐ Yes (If "Yes", go to question 7d.)7d. How many days were you (was he/she) in the hospital?
_____ days

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown

National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DS1-94-AB-016

3. Vehicle Number

4. Occupant Number

01

01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

A.I.S. - 90

	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	ICD-
1st	5. 2	6. 2	7. 9	8. 72	9. 02	10. 1	11. 1	12. 45	13. 1	14. 1	15. 00	918.4
2nd	16. 2	17. 2	18. 9	19. 72	20. 02	21. 1	22. 1	23. 45	24. 1	25. 1	26. 00	918.4
3rd	27. 2	28. 2	29. 4	30. 04	31. 16	32. 1	33. 2	34. 45	35. 1	36. 1	37. 00	372.7
4th	38. 2	39. 2	40. 4	41. 04	42. 16	43. 1	44. 2	45. 45	46. 1	47. 1	48. 00	372.7
5th	49. 2	50. 2	51. 4	52. 09	53. 00	54. 1	55. 1	56. 45	57. 1	58. 1	59. 00	871.1
6th	60. 2	61. 2	62. 4	63. 32	64. 02	65. 1	66. 8	67. 45	68. 1	69. 1	70. 00	920.4
7th	71. 2	72. 2	73. 4	74. 06	75. 04	76. 1	77. 2	78. 45	79. 1	80. 1	81. 00	364.4
8th	82. 2	83. 2	84. 4	85. 06	86. 04	87. 1	88. 1	89. 45	90. 1	91. 1	92. 00	364.4
9th	93. 2	94. 2	95. 9	96. 02	97. 02	98. 1	99. 1	100. 45	101. 1	102. 1	103. 00	910.0
10th	104. 2	105. 2	106. 4	107. 16	108. 99	109. 1	110. 1	111. 45	112. 1	113. 1	114. 00	872.2

[illegible]

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

ABRASION, RIGHT CHEEK

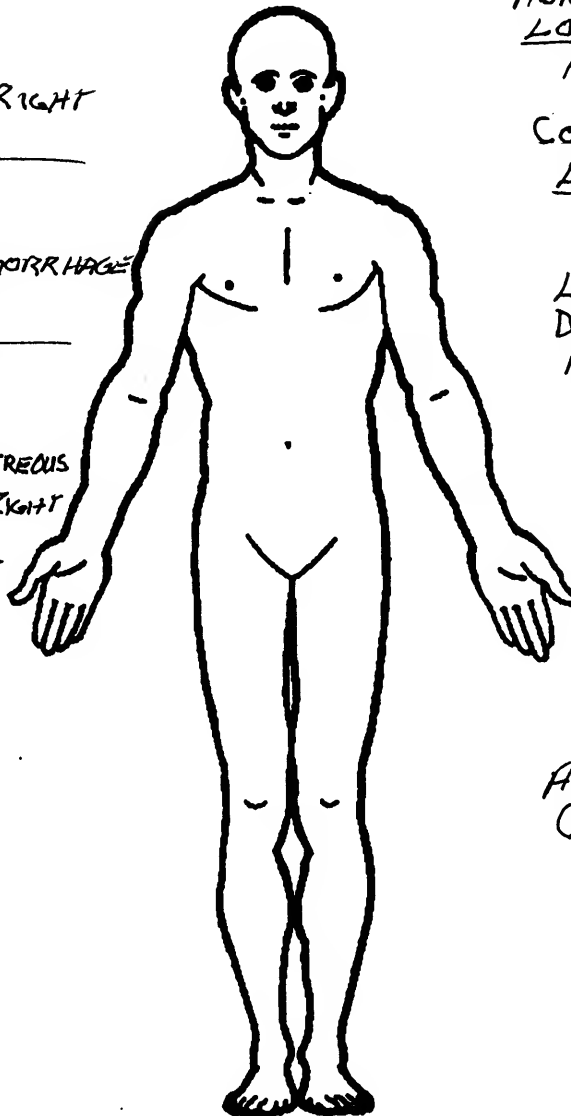
AIR BAG

VITREOUS HEMORRHAGE RIGHT EYE

AIR BAG

POSTERIOR VITREOUS DETACHMENT, RIGHT EYE

AIR BAG



ABRASIONS, RIGHT & LEFT LOWER EYELIDS

AIR BAG

CONJUNCTIVA HEMORRHAGE LEFT & RIGHT EYES

AIR BAG

LENICULAR SHAPED DISRUPTION OF THE RIGHT IRIS (TEAR/IRIDODIALYSIS)

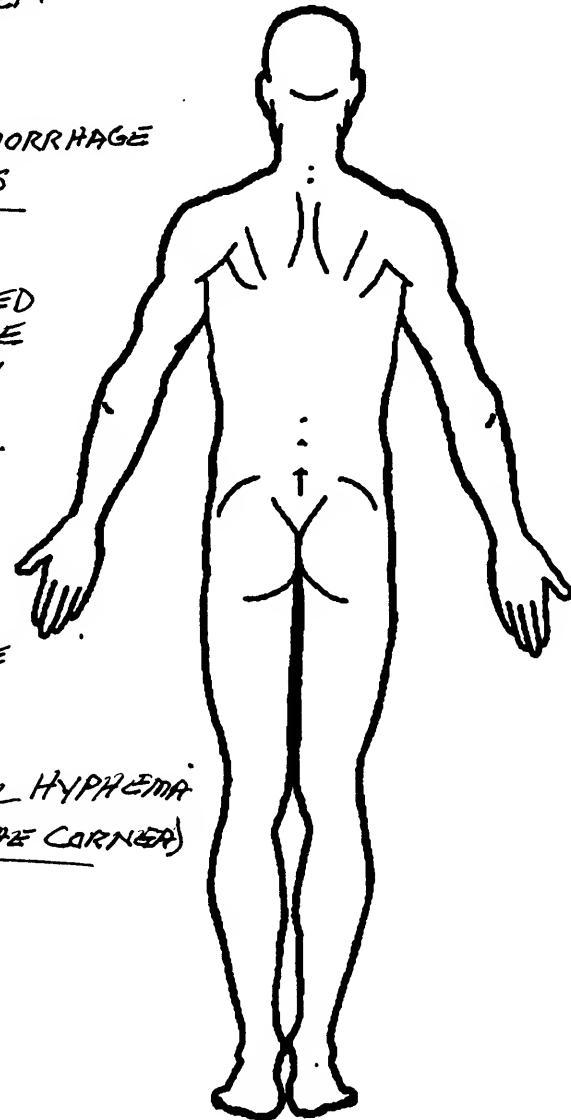
AIR BAG

EDEMA W/ ECHYMOSIS OF THE MUCOSAL SURFACE OF THE UPPER LIP

AIR BAG

ACUTE BILATERAL HYPHEMA (CONTUSION OF THE CORNEA)

AIR BAG



OFFICIAL INJURY DATA — SKELETAL INJURIES

BEST AVAILABLE COPY

National Accident Sampling System-Crashworthiness Data System: Occupant Injury Form

Page 3

Restrained?

___ No

___ Yes

Blood Alcohol Level
(mg/dl)

BAL = ___

Glasgow Coma
Scale Score

GCSS = ___

Units of Blood
Given

Units = ___

Arterial Blood Gases

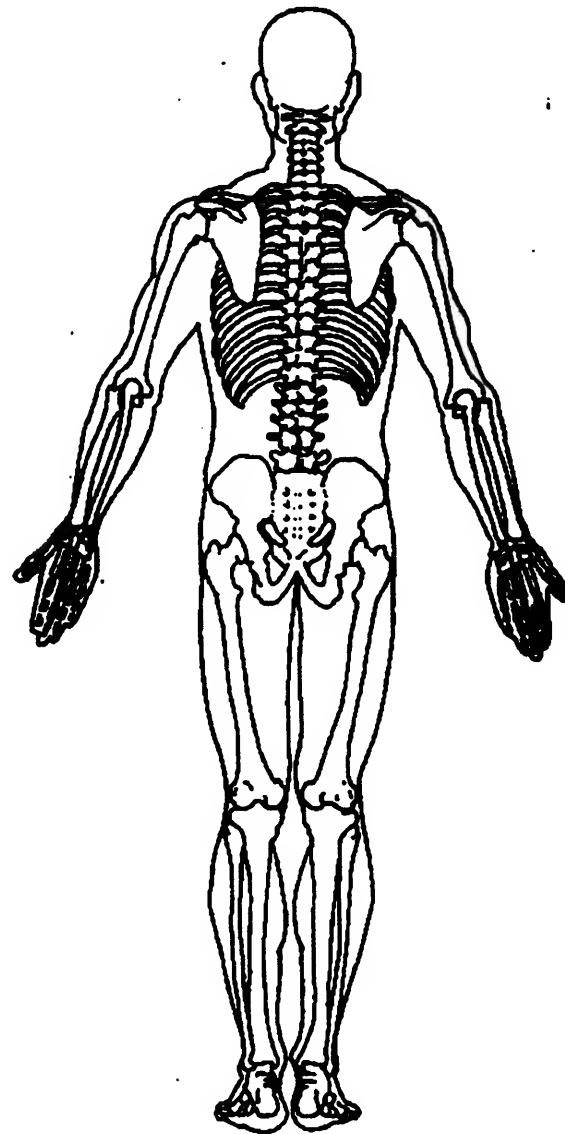
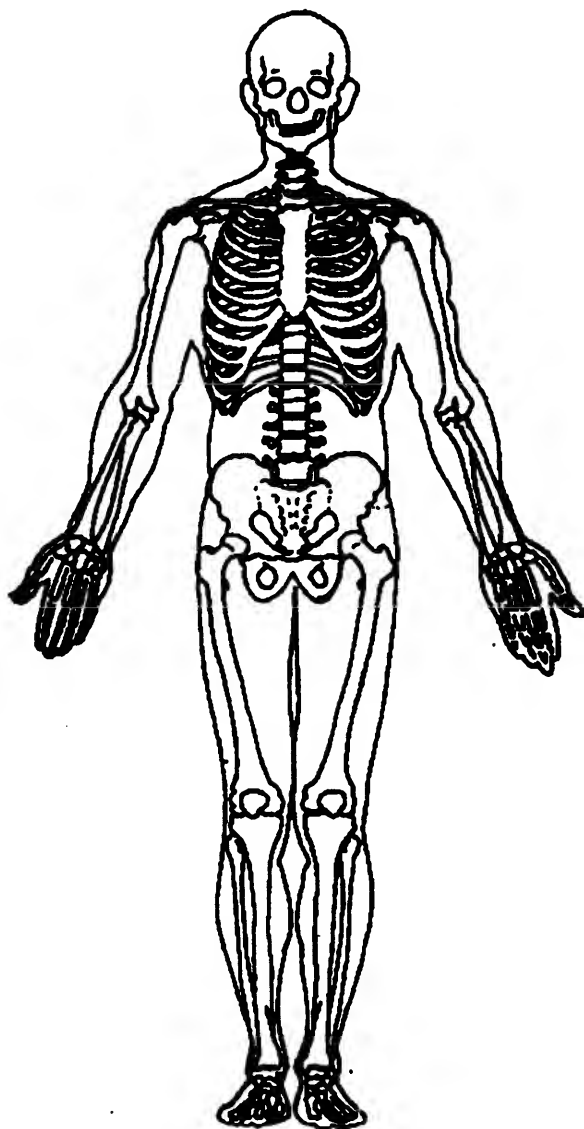
pH = ___

PO₂ = ___

PCO₂ = ___

HCO₃ = ___

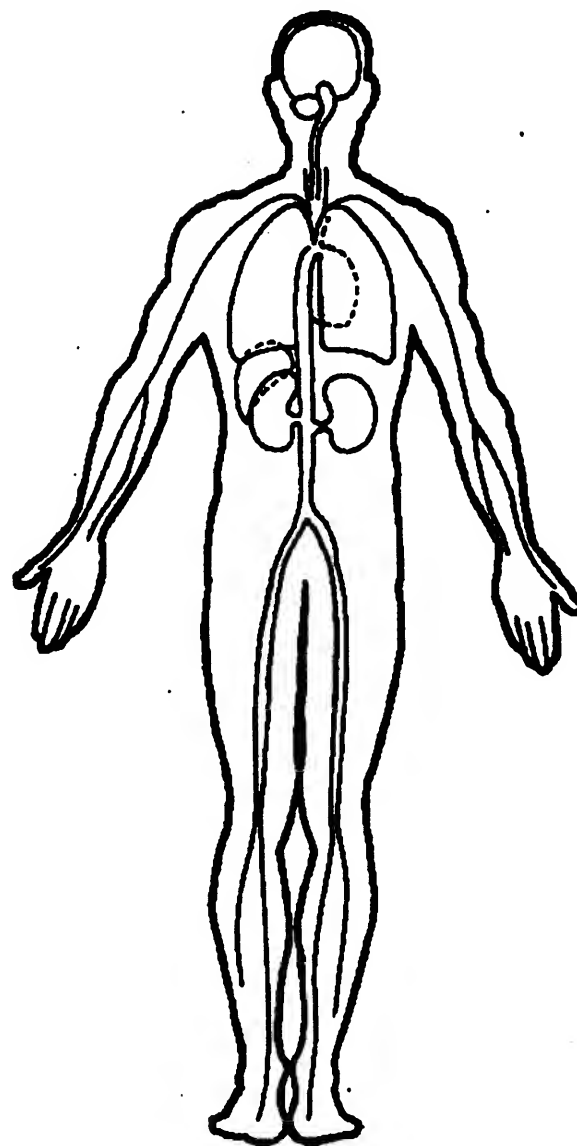
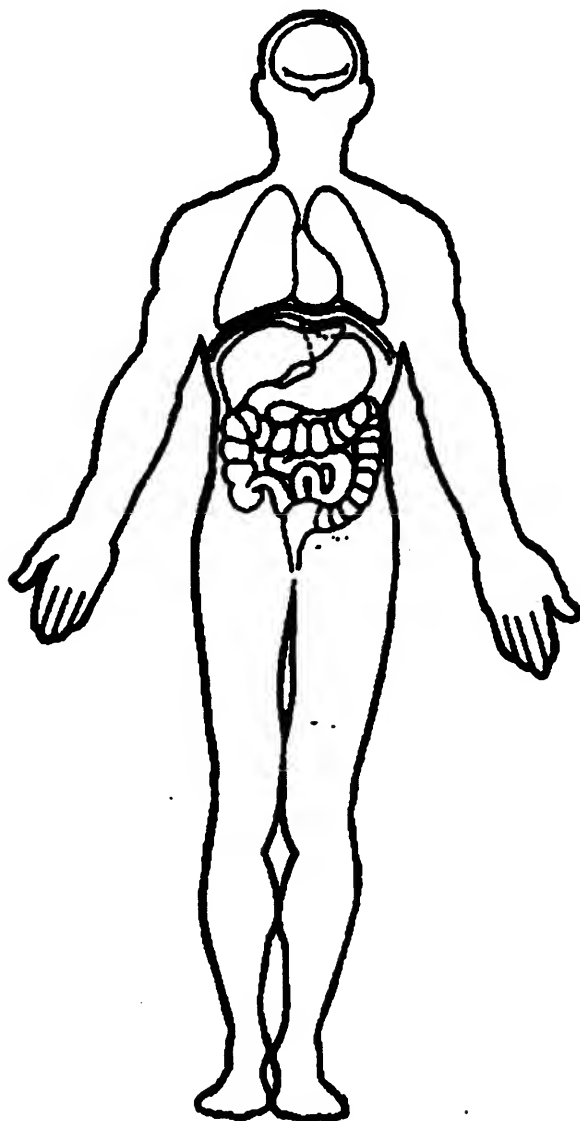
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA —INTERNAL INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Specific Anatomic Structure

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones,

Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable) Injured, unknown severity
- (7)

Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

National Highway Traffic Safety
Administration

OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

DSI-94-AB-16

2. Case Number - Stratum

3. Vehicle Number

01

4. Occupant Number

02

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

76 inches X 2.54 = 193 centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

210 pounds X .4536 = 95 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 99

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 7

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): 3pt belts and Air bag
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown

26. Seat Type (this Occupant Position) 02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0032. Child Safety Seat Shield Usage 0033. Child Safety Seat Tether Usage 00Note: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 99

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 02

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/ Function** 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
- [x] Vehicle inspection
- [] Official injury data
- [] Driver/occupant interview
- [] Other (specify): _____

[] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [x] YES []

UPDATE CANDIDATE?

NO [x] YES []

STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 01
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

51. Was the Occupant Given Blood? 1
(1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 01
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported, HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 1
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): _____
(9) Unknown if belt used

National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-94-AB-T6

3. Vehicle Number

4. Occupant Number

01
02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. 7	6. 2	7. 9	8. 02	9. 02	10. 1	11. 7	12. 45	13. 1	14. 1	15. 00
2nd	16. 9	17. 2	18. 9	19. 06	20. 00	21. 1	22. 7	23. 45	24. 1	25. 1	26. 00
3rd	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____	35. ____	36. ____	37. ____
4th	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____	45. ____	46. ____	47. ____	48. ____
5th	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____	55. ____	56. ____	57. ____	58. ____	59. ____
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

OCCUPANT INJURY DATA

Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	---	---	---	---	---	---	---	---	---	---
12th	---	---	---	---	---	---	---	---	---	---
13th	---	---	---	---	---	---	---	---	---	---
14th	---	---	---	---	---	---	---	---	---	---
15th	---	---	---	---	---	---	---	---	---	---
16th	---	---	---	---	---	---	---	---	---	---
17th	---	---	---	---	---	---	---	---	---	---
18th	---	---	---	---	---	---	---	---	---	---
19th	---	---	---	---	---	---	---	---	---	---
20th	---	---	---	---	---	---	---	---	---	---
21st	---	---	---	---	---	---	---	---	---	---
22nd	---	---	---	---	---	---	---	---	---	---
23rd	---	---	---	---	---	---	---	---	---	---
24th	---	---	---	---	---	---	---	---	---	---
25th	---	---	---	---	---	---	---	---	---	---

SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____
- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
 - (31) Right side hardware or armrest
 - (32) Right A (A1/A2)-pillar
 - (33) Right B-pillar
 - (34) Other right pillar (specify): _____
 - (35) Right side window glass or frame
 - (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 - (37) Other right side object (specify): _____
 - (38) Right side window sill
- ### INTERIOR
- (40) Seat, back support
 - (41) Belt restraint webbing/buckle
 - (42) Belt restraint B-pillar or door frame attachment point
 - (43) Other restraint system component (specify): _____
 - (44) Head restraint system
 - (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
 - (46) Other occupants (specify): _____
 - (47) Interior loose objects
 - (48) Child safety seat (specify): _____
 - (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____
- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

Type of Anatomical Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Specific Anatomical Structure

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones,
Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

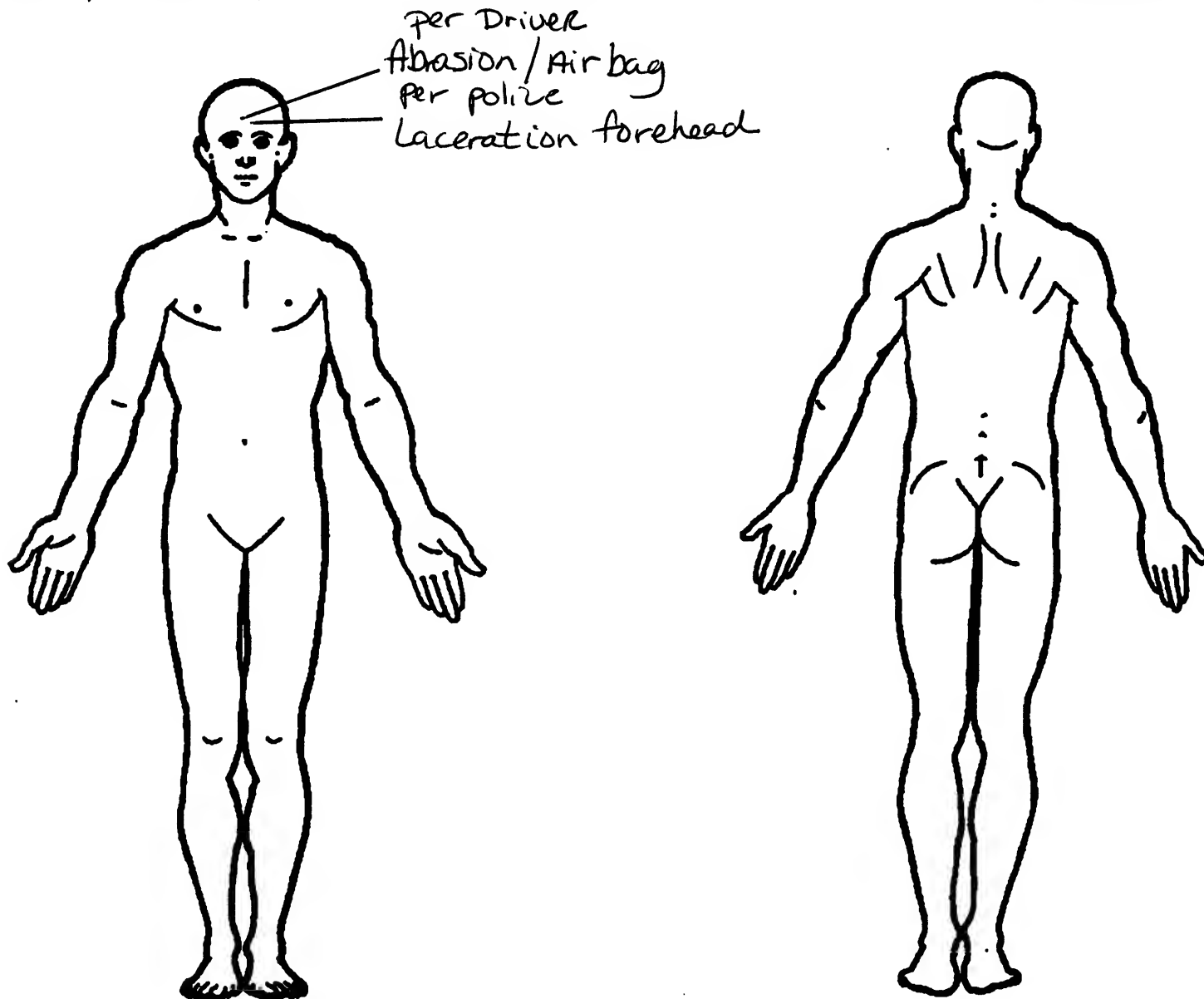
Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — SKELETAL INJURIES

BEST AVAILABLE COPY

Restrained?

- ☐ No
☐ Yes

Blood Alcohol Level
(mg/dl)

BAL = ____

Glasgow Coma
Scale Score

GCSS = ____

Units of Blood
Given

Units = ____

Arterial Blood Gases

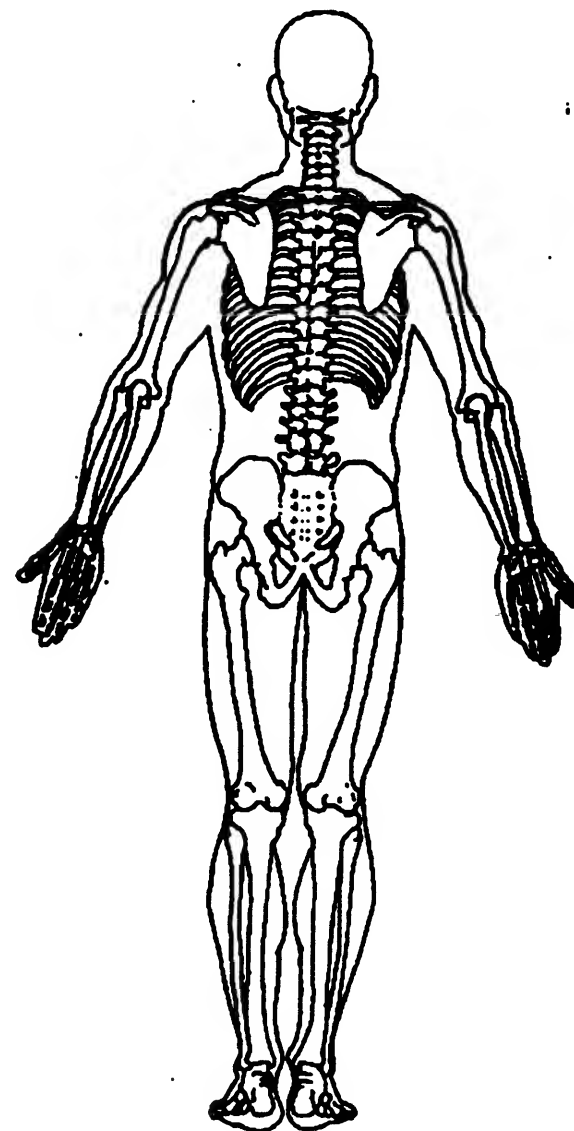
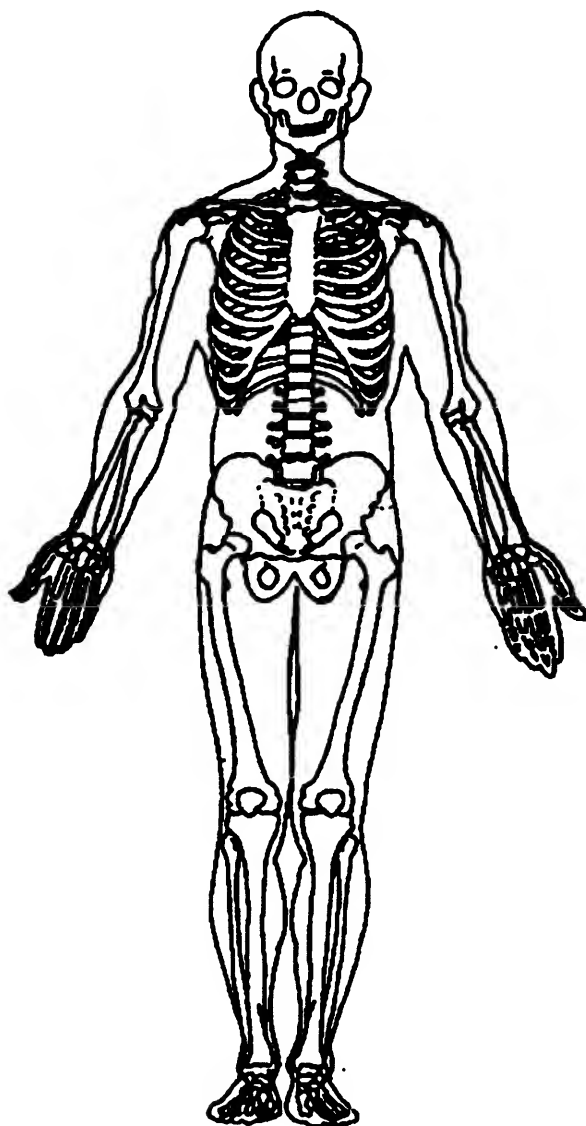
pH = ____

PO₂ = ____

PCO₂ = ____

HCO₃ = ____

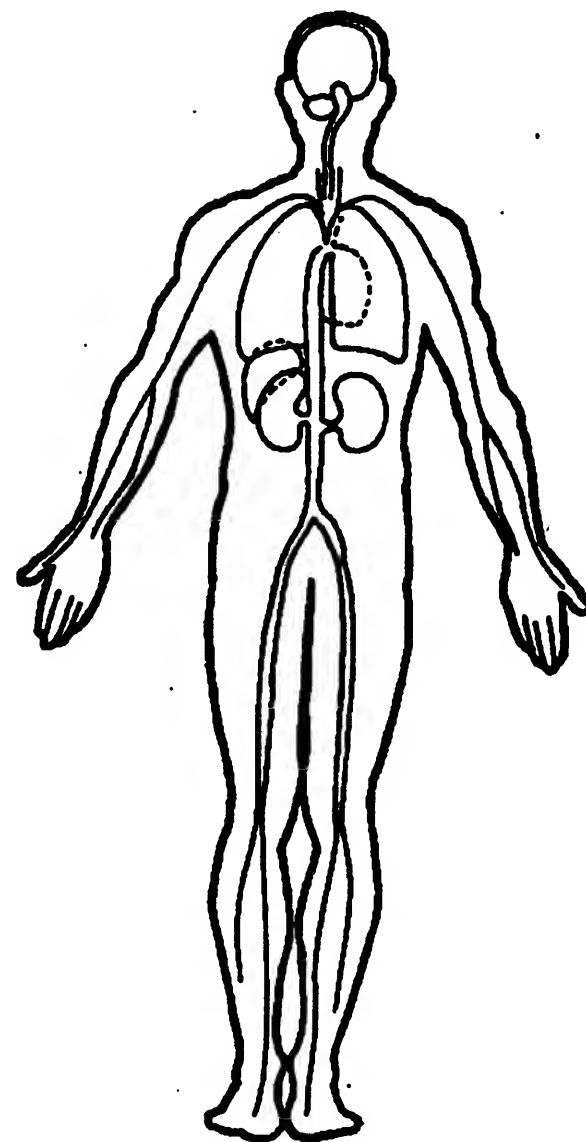
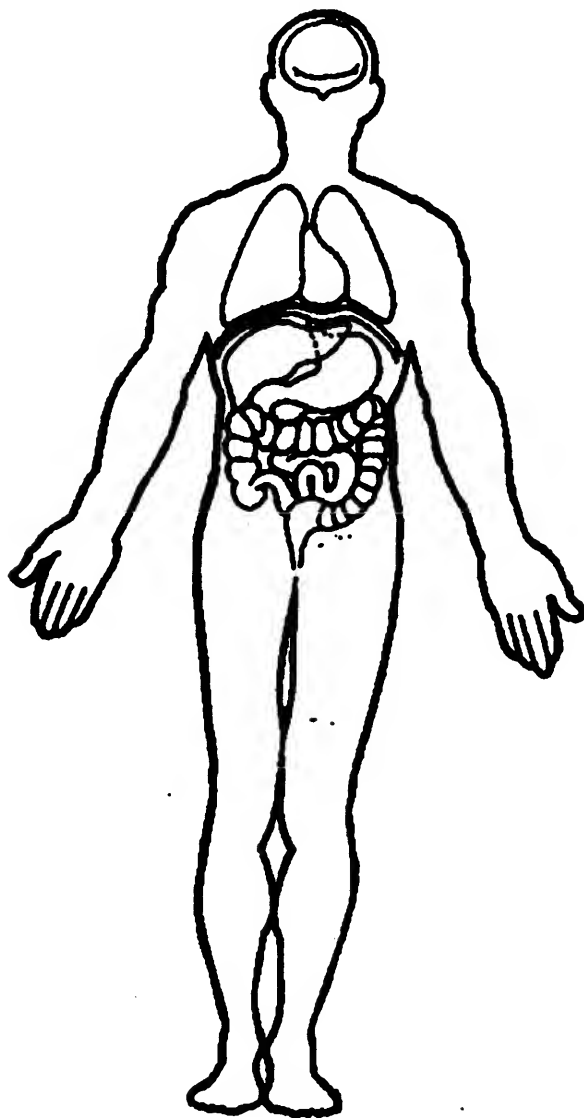
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — INTERNAL INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



National Highway Traffic Safety
Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

DSI-94-AB-16

2. Case Number - Stratum

3. Vehicle Number

02

VEHICLE IDENTIFICATION

4. Vehicle Model Year

83

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

OLds

21

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

Cutlass 001

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type

02

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

1G3AM47A9DM * * * * *

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

000

Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown

___ mph X 1.6093 = ___ kph

11. Police Reported Alcohol Presence

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) UnknownNote: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit

(000) No statutory limit
Code posted or statutory speed limit
in kph
(999) Unknown

45 mph X 1.6093 = 072 kph

contrary
to
police report

14. Attempted Avoidance Maneuver

(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type

Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

BEST AVAILABLE COPY

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____
- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck (4,500 kgs $<$ GVWR \leq 8,850 kgs)
- (62) Single unit straight truck (8,850 kgs $<$ GVWR \leq 12,000 kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 2

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 01
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 01

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1740
 Code weight to nearest 10 kilograms.
 (045) Less than 450 kilograms
 (610) 6,100 kilograms or more
 (999) Unknown
3248 lbs X .4536 = 1740 kgs
 Source: [REDACTED]

20. Vehicle Cargo Weight 000
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (450) 4,500 kilograms or more
 (999) Unknown

_____, ____ lbs X .4536 = _____ kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted < 45 degrees
 (4) Tilted ≥ 45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify): _____
 (9) Unknown

24. Rollover 0
 (0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*
 (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify): _____

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
 26. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify): _____

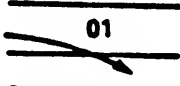



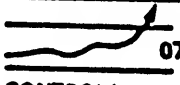

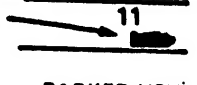
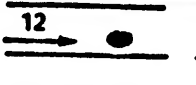
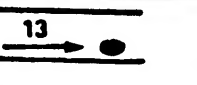
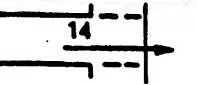
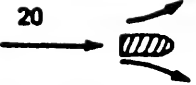
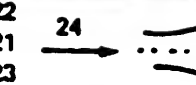
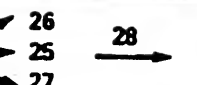
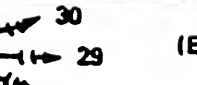


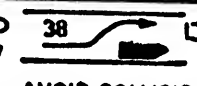
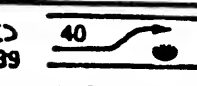
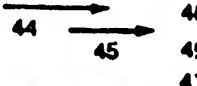

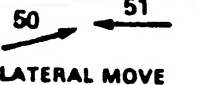
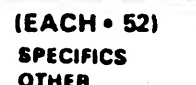


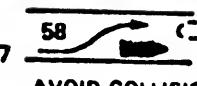
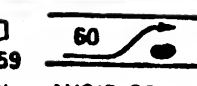
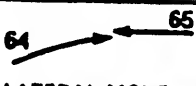


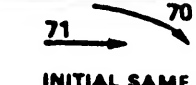
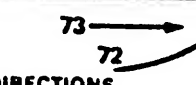

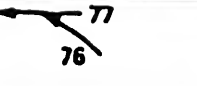
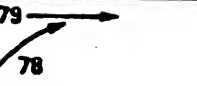
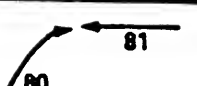
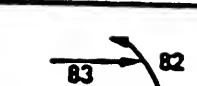
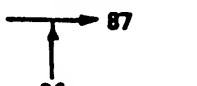
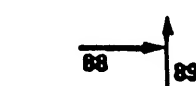
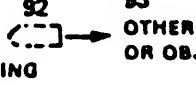

- Underride (see specific CDC)*
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify): _____

- (7) Medium/heavy truck or bus override
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

27. Heading Angle For This Vehicle 090
 28. Heading Angle For Other Vehicle 085

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 26 DECEL. 28, 29, 30, 31	 30 SPECIFICS OTHER 31 SPECIFICS UNKNOWN	(EACH • 32) (EACH • 33)
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) (EACH • 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 SPECIFICS OTHER	 46 SPECIFICS UNKNOWN	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN		
III Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 SPECIFICS OTHER	(EACH • 52) SPECIFICS UNKNOWN (EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) (EACH • 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 SPECIFICS OTHER	(EACH • 66) SPECIFICS UNKNOWN (EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 SPECIFICS OTHER	 74 SPECIFICS UNKNOWN	(EACH • 74) (EACH • 75)
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 80 SPECIFICS OTHER	 82 SPECIFICS UNKNOWN	(EACH • 84) (EACH • 85)
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 SPECIFICS OTHER	 88 SPECIFICS UNKNOWN	(EACH • 90) SPECIFICS UNKNOWN (EACH • 91) SPECIFICS UNKNOWN		
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Highest

999

_____ Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of Delta V

+ 999

_____ Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(__999) Unknown

32. Lateral Component of Delta V

Highest

+ 999

_____ Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(__999) Unknown

33. Energy Absorption

9999.00

_____ Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

(0) No inspection

(1) Complete inspection

(2) Partial inspection (specify): _____

36. Is this an AOPS Vehicle?

(0) No

(1) Yes - researcher determined

(2) VIN determined air bag system

(3) VIN determined automatic (passive) belts

(4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drug(s) present
- (1) Yes [other drug(s) present]
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION

OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
(01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
(33) Jackknife

Collision With Fixed Object

- (41) Tree (\leq 10 cm in diameter)
(42) Tree ($>$ 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (\leq 10 cm in diameter)
(51) Pole or post ($>$ 10 cm but \leq 30 cm in diameter)
(52) Pole or post ($>$ 30 cm in diameter)
(53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____

- (69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object

- (98) Other event (specify): _____

- (99) Unknown event or object

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

per police

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify):
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):

(8) Non-contact rollover forces (specify):

(9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

PRECRASH DATA (Continued)

65. Critical Precrash Event

52*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

For Corrective Actions Attempted see variable GV14
(Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 0

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 0

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



U.S. Department of Transportation
National Highway Traffic Safety
Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

Interviewee(s) Role or Name(s):

Driver

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

It was plain and simple.
I came to a stop at light and
3-4 seconds later I got
rear-ended.

Are the other people suing?

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS



U.S. Department of Transportation
National Highway Traffic Safety
Administration

INTERVIEW FORM (B)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

Interviewee(s) Role or Name(s):

Driver

ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

☐ North ☐ South ☒ East ☐ West

(Optional - Where were you coming from or going to?)

2. In which lane were you traveling?

(Note: Lane 1 is designated as the right curb lane.)

[1] (2) [3] [4] ☐ Other (specify):

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

☒ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

☐ Going straight ☒ Stopped
☐ slowing ☐ Accelerating
☐ Turning left ☐ Turning right
☐ Changing lanes to left ☐ Changing lanes to right
☐ Backing
☐ Other (specify):

5. Did you experience any loss of control due to weather conditions or mechanical problems?

☐ No
☐ Yes (If yes, describe below)

6. Did you have to take any avoidance actions prior to the accident?

☐ No - Go to question 7
☐ Yes - Go to question 6a

6a. What actions did you take?

☐ Braking with lock-up
☐ Braking without lock-up
☐ Releasing brakes
☐ Accelerating
☐ Steering left
☐ Steering right
☐ Other (specify):

7. Where was your vehicle at the time of the collision?

☐ Original travel lane ☐ Different travel lane
☐ In intersection ☐ Off roadway to right
☐ Off roadway to left
☐ Other (specify):

8. Was your travel speed at the time of the collision different from your previous travel speed?

☐ No
☐ Lower
☐ Higher
☐ Unknown

8a. Can you estimate your speed at the time of the collision?

☐ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

National Accident Sampling System-Crashworthiness Data System: Interview Form (B)

Page 2

1. Primary Sampling Unit Number

3. Vehicle Number

02

2. Case Number - Stratum

DSI-94-AB-14

Occupant Number

01

VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?

1 9 Olds Cutlass
 Year Make Model

2. Can you describe the damage to your vehicle?

3. Was there any previous damage to your vehicle that is not related to this accident?

- ☐ No
☐ Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?

- ☐ No
☐ Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?

- ☐ No
☐ Yes (If "Yes", describe below)

6. Does your vehicle have a glove compartment?

- ☐ No
☐ Yes

6a. Did the glove compartment door come open during the accident?

- ☐ No
☐ Yes
☐ Unknown

7. Does your vehicle have "seat belts"?

- ☐ No (If "No", go to question 7b)
☐ Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Front seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Front seat right	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat left	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat right	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder

(Identify seat belts for third row and beyond)

7b. Were any of the belts removed or not functional prior to the accident?

- ☐ No
☐ Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?

- ☐ No (If "No", go to question 9)
☐ Yes (If "Yes", what seat location?)
☐ Left Front
☐ Right Front

8a. Were the motorized belts working properly before the accident?

- ☐ No (If "No", describe condition below)

☐ Yes

8b. Were the belts connected to the track prior to the accident?

- ☐ No
☐ Yes
☐ Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

- ☐ No (go to question 10)
☐ Yes

9a. Does this belt come across the _____?

- ☐ Chest only
☐ Lap and chest

9b. Was this belt connected prior to the accident?

- ☐ No
☐ Yes
☐ Unknown

AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?

- ☐ No (go to question 11)
☐ Yes (go to question 10a)
☐ Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

- ☐ No (go to questions 10b and 10c)
☐ Yes (go to question 10e)

National Accident Sampling System-Crashworthiness Data System: Interview Form (B)

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

DSI-94-AB-16

4. Occupant Number

02
01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?

☐ No☐ Yes (If "Yes", describe previous condition)☐ Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?

☐ No (go to question 11)☐ Yes (go to question 10d)☐ Unknown

10d. Was the air bag re-installed after the accident?

☐ No (go to question 11)☐ Yes☐ Unknown

10e. Did the air bag inflate as you expected?

☐ No (If "No" describe below)☐ Yes☐ Unknown

11. Is your vehicle equipped with a passenger side air bag?

☐ No (If "No", go to question 12)☐ Yes (If "Yes", go to question 11a)☐ Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?

☐ No (go to question 11b)☐ Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?

☐ No☐ Yes (If "Yes", describe below)☐ Unknown

11c. Was the passenger air bag inflated in a previous accident?

☐ No (go to question 12)☐ Yes (go to question 11d)☐ Unknown

11d. Was the passenger air bag re-installed after the accident?

☐ No (go to question 12)☐ Yes☐ Unknown

11e. Did the passenger air bag inflate as you expected?

☐ No (If "No" describe below)☐ Yes☐ Unknown

CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?

☒ No (If "No", go to question 13)☐ Yes☐ Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?

12b. Can you describe the type of child safety seat?

☐ Infant☐ Toddler☐ Convertible☐ Booster☐ Other (specify):☐ Unknown

12c. Where was the child safety seat(s) located?

☐ [12] [13]☐ [21] [22] [23]☐ [31] [32] [33]☐ [Other] (specify):

12d. Can you tell me which direction the child safety seat was facing prior to the accident?

☐ Rear facing☐ Forward facing.☐ Other (specify):☐ Unknown

12e. Was a seat belt used to hold the child seat in place?

☐ No (If "No", go to question 12g)☐ Yes (If "Yes", go to question 12f)☐ Unknown

12f. Can you describe how the seat belt was secured to the child seat?

☐ Looped through designated rear framing struts?☐ Looped through arm rest slots?☐ Belt across safety shield?☐ Looped through rear frame outside the designated framing struts?☐ Other (specify):☐ Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)

☐ Harness☐ Shield☐ Tether strap

If any box is checked, ask questions 12h - 12i.

National Accident Sampling System-Crashworthiness Data System: Interview Form (B)

Page 4

1. Primary Sampling Unit Number

3. Vehicle Number

02

2. Case Number - Stratum

DSI-94-AB-16

4. Occupant Number

01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?

☐ Yes

(specify _____)

☐ No☐ Unknown

12i. Were any of these items used during the accident?

☐ Yes (If "Yes", check all that apply)☐ Harness☐ Shield☐ Tether strap)☐ No☐ Unknown

OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

16. May I take a look at your vehicle to assess the damage?

☐ No☐ Yes

DRIVER ONLY

17. What race do you consider yourself?

☐ White☐ Black☐ American Indian, Eskimo or Aleut, Asian or Pacific Islander☐ Other (specify: _____)☐ Unknown.

18. Are you of hispanic origin?

☐ No☐ Yes

CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?

☐ No (If "No", go to question 14)☐ Yes (If "Yes", go to question 13a)☐ Unknown

13a. Can you estimate the weight of the cargo?

_____ lbs.

Cargo description

14. Can you tell me the mileage on the vehicle?

_____ miles

1. Primary Sampling Unit Number _____ 3. Vehicle Number 022. Case Number - Stratum DSI 94-AB-18 4. Occupant Number 01

VEHICLE ROLLOVER/FIRE QUESTIONS

ROLLOVER QUESTIONS

1. Did the vehicle rollover during the accident?

☒ No (If "No", go to question 2.)☐ Yes☐ Unknown (skip to question 2)

1a. Describe where the rollover began.

☐ On roadway☐ On shoulder☐ On roadside or median☐ Unknown

1b. What caused the vehicle to rollover?

☐ Other vehicle (specify vehicle number): _____☐ Contacted object (specify): _____☐ Other cause (specify): _____☐ Unknown

1c. Describe which direction the vehicle rolled.

☐ Toward the right☐ Toward the left☐ End-over-end☐ Unknown

1d. Estimate the number of sides (including the top and bottom) which contacted the ground during the rollover?

☐ 1 side☐ 2 sides☐ 3 sides☐ 4 sides☐ Unknown

1e. Did the vehicle roll over more than one complete turn (more than 4 sides)?

☐ No (If "No", go to question 1g.)☐ Yes

1f. Estimate the number of complete turns.

☐ No☐ Yes (specify): _____☐ Unknown

1g. When the vehicle stopped rolling over, which side of the vehicle was in contact with the ground?

☐ Left side☐ Right side☐ Top☐ Wheels☐ Unknown

FIRE QUESTIONS

2. Did the vehicle experience a fire?

☒ No (If "No", skip to Occupant Data Questions)☐ Yes☐ Unknown

2a. Describe where the fire started or where smoke was first seen.

☐ Under the hood☐ Behind the instrument panel☐ In the passenger compartment☐ In the trunk/cargo area☐ Under the vehicle☐ From other involved vehicle☐ Unknown

2b. Did the fire start with the electrical system?

☐ No☐ Yes (specify): _____☐ Unknown

2c. Did the fire start with the fuel system?

☐ No (If "No", skip to Occupant Data Questions)☐ Yes (go to question 2d)☐ Unknown

2d. Describe which part of the fuel system that may have been involved?

☐ No☐ Yes (specify): _____

____ Fuel tank

____ Fuel lines

____ Engine compartment (specify component if known)

☐ Unknown

(Go To Occupant Data Questions)

COMMENTS ON ROLLOVERS AND FIRES

National Accident Sampling System-Crashworthiness Data System: Interview Form (B)

Page 6

1. Primary Sampling Unit Number

3. Vehicle Number

02

2. Case Number - Stratum

DSI-94-AB-16

4. Occupant Number

01

OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?

- ☐ No (If "No", go to question 4)
☐ Yes (If "Yes", specify number in question 2 below and then go to question 3)
☐ Unknown

2. How many?

- ☐ 1 One other person
☐ 2 Two other persons
☐ 3 Three other persons
☐ 4 Four other persons
☐ 5 Five other persons
☐ 6 Six other persons
☐ 7 Seven or more other persons
(specify number:)

3. Where was this person sitting? (Circle seating positions)

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| | <input type="checkbox"/> 12 | <input type="checkbox"/> 13 |
| <input type="checkbox"/> 21 | <input type="checkbox"/> 22 | <input type="checkbox"/> 23 |
| <input type="checkbox"/> 31 | <input type="checkbox"/> 32 | <input type="checkbox"/> 33 |
- ☐ Other (specify:)

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 6' Weight 190 Age 53Sex: ☒ Male ☐ Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?

Normal

5a. Can you describe the location of your (his/her) feet just prior to the collision?

5b. Can you describe the location of your (his/her) arms?

5c. Was your (his/her) back resting against the seat back rest?

- ☐ No (If "No", describe the position)
☐ Yes
☐ Unknown

5d. Were you (Was he/she)

- ☐ Sitting upright or
☐ Leaning to left side, or
☐ Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

- ☐ No (If "No", go to question 7)
☐ Yes (If "Yes", go to question 6a)
☐ Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?

- ☐ No
☐ Yes (Describe:)

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

- ☐ No (If "No", go to question 8)
☐ Yes
☐ Unknown

7a. Were you (Was he/she) wearing the

- ☐ Lap belt?
☐ Lap and Shoulder belt?
☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

- ☐ Across the stomach
☐ Low on lap
☐ Other (specify:)
☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

- ☐ Over the shoulder
☐ Under the arm
☐ Behind the back
☐ Behind the seat
☐ Other (specify:)

7d. Did any part of the belt system break or tear?

- ☐ No
☐ Yes (If "Yes", describe)
☐ Unknown

OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

- ☐ No
☐ Yes (If "Yes", describe)
☐ Unknown

PSU Number _____

Case Number—Stratum

DSI 94 AB 16

Vehicle Number 02

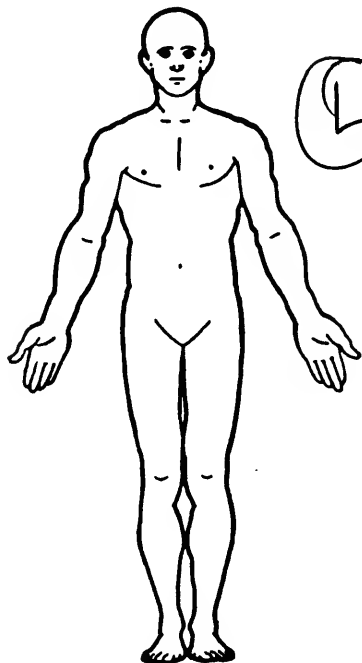
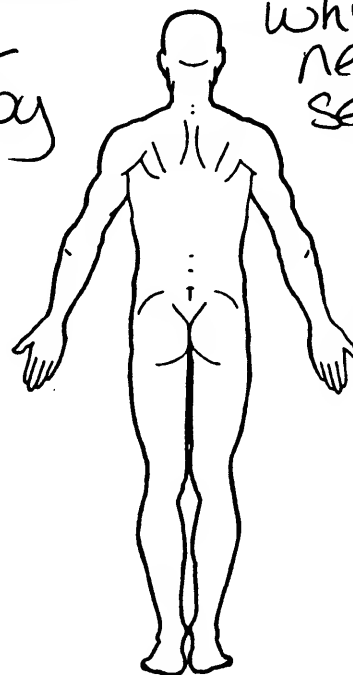
Occupant Number 01

INJURY DATA FROM INTERVIEWEE(S)

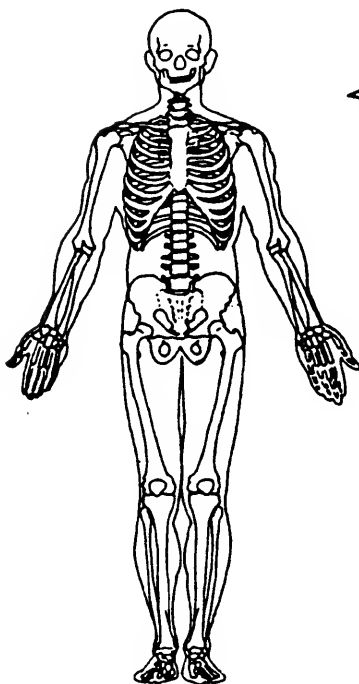
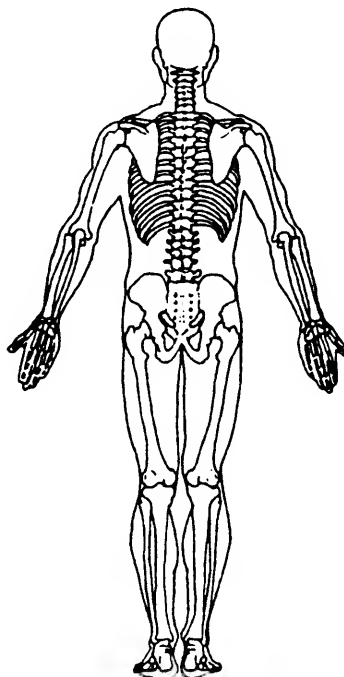
Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s):

Driver

SOFT TISSUE/INTERNAL INJURIES

Ⓛ Shoulder
in therapywhiplash
neck
seat back
soreLower
Back

SKELETAL INJURIES

* Broke
Seat
Back

The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

- ☐ No (If "No", skip to question 7)
☐ Yes (If "Yes", complete Occupant Injury Questions)
☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- ☐ No (go to question 3)
☐ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)
☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
☐ Unknown

3. Did you (he/she) experience any broken bones?

- ☐ No (If "No", go to question 4)
☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)
☐ Unknown

3a. Do you know what caused the injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
☐ Unknown

4. Did you (he/she) injure your (his/her) head? (skull/brain?)

- ☐ No (If "No", go to question 5)
☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)
☐ Unknown

4a. Do you know what caused the injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

5. Were any of your (his/her) internal organs injured?

- ☐ No (If "No", go to question 6)
☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)
☐ Unknown

5a. Do you know what caused this injury?

- ☐ No
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- ☐ No (If "No", go to question 7)
☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)
☐ Unknown

6a. Do you know what caused the injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

7. Did you (he/she) receive any treatment?

- ☐ No (If "No", go to question 8)
☐ Yes (If "Yes", go to question 7a or return to question 2.)

7a. Were you (Was he/she) treated by (check all that apply):

- ☐ Hospital/trauma center? (specify hospital name):
☐ Medical clinic
☐ Out patient surgery? (specify medical facility):
☐ Paramedics or first aid at the scene?
☐ A doctor in his/her office?
☐ Treated at home?
☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- ☐ No (If "No", go to question 7c.)
☐ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- ☐ No (If "No", give an explanation)
☐ Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?
_____ days

National Accident Sampling System-Crashworthiness Data System: Interview Form (B)

Page 9

1. Primary Sampling Unit Number _____

3. Vehicle Number 022. Case Number - Stratum DSI-94-AB164. Occupant Number 01

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☐ No☒ Yes (If "Yes", describe:)☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown

1. Primary Sampling Unit Number _____ 3. Vehicle Number 02
 2. Case Number - Stratum DSI-94-AB-16 4. Occupant Number 01

OCCUPANT DATA QUESTIONS SUPPLEMENT

1. Who was the next occupant in your vehicle at the time of the accident?

2. Occupant Number _____ of _____.

3. Where were you (was this person) sitting? (Circle seating positions)

[21] [12] [13]
 [22] [23]
 [31] [32] [33]
☐ Other (specify): _____

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height _____ Weight _____ Age _____

Sex: ☐ Male ☐ Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she) was sitting in the vehicle?

5a. Can you describe the location of your (his/her) feet just prior to the collision?

5b. Can you describe the location of your (his/her) arms?

5c. Was your (his/her) back resting against the seat back rest?
☐ No (If "No", describe the position)

☐ Yes
☐ Unknown

5d. Were you (Was he/she)
☐ Sitting upright or
☐ Leaning to left side, or
☐ Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?
☐ No (If "No", go to question 7)
☐ Yes (If "Yes", go to question 6a)
☐ Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?
☐ No
☐ Yes (Describe:)

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?
☐ No (If "No", go to question 8)
☐ Yes
☐ Unknown

7a. Were you (Was he/she) wearing the
☐ Lap belt?
☐ Lap and Shoulder belt?
☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?
☐ Across the stomach
☐ Low on lap
☐ Other (specify:)
☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?
☐ Over the shoulder
☐ Under the arm
☐ Behind the back
☐ Behind the seat
☐ Other (specify:)

7d. Did any part of the belt system break or tear?
☐ No
☐ Yes (If "Yes", describe)
☐ Unknown

OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?
☐ No
☐ Yes (If "Yes", describe)

☐ Unknown

National Highway Traffic Safety
Administration

OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

72 inches X 2.54 = 182.8 centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

190 pounds X .4536 = 86.1 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position

9

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown

26. Seat Type (this Occupant Position)

99

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

3

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
(specify): * "Broke seat back"
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion
(specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

* per driver.

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage

32. Child Safety Seat Shield Usage

33. Child Safety Seat Tether Usage

Note: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 1

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 06

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 01

- _____ Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
 (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):
 (8) Other improper use of automatic belt system (specify):
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):
 (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):
 (9) Unknown

49. Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
 [] Vehicle inspection
 [X] Official injury data
 [X] Driver/occupant interview
 [] Other (specify):

[] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [] YES []

UPDATE CANDIDATE?

NO [] YES []

**STOP - VARIABLES 50 THROUGH 53 ARE
COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 02
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the
initial GCS Score recorded at medical
facility.
(97) Injured, details unknown
(99) Unknown if injured

51. Was the Occupant Given Blood? 1
(1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 01
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported, HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 2
(0) Not equipped/not available/destroyed
or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): _____
(9) Unknown if belt used

National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number <u>DSI-94-AB-16</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum _____	4. Occupant Number <u>01</u>

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	A.I.S. - 90				Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
			Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
1st	5. <u>7</u>	6. <u>6</u>	7. <u>4</u>	8. <u>02</u>	9. <u>78</u>	10. <u>1</u>	11. <u>6</u>	12. <u>92</u>	13. <u>3</u>	14. <u>3</u>	15. <u>00</u>
2nd	16. ____	17. ____	18. ____	19. ____	20. ____	21. ____	22. ____	23. ____	24. ____	25. ____	26. ____
3rd	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____	35. ____	36. ____	37. ____
4th	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____	45. ____	46. ____	47. ____	48. ____
5th	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____	55. ____	56. ____	57. ____	58. ____	59. ____
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

OCCUPANT INJURY DATA

Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	---	---	---	---	---	---	---	---	---	---
12th	---	---	---	---	---	---	---	---	---	---
13th	---	---	---	---	---	---	---	---	---	---
14th	---	---	---	---	---	---	---	---	---	---
15th	---	---	---	---	---	---	---	---	---	---
16th	---	---	---	---	---	---	---	---	---	---
17th	---	---	---	---	---	---	---	---	---	---
18th	---	---	---	---	---	---	---	---	---	---
19th	---	---	---	---	---	---	---	---	---	---
20th	---	---	---	---	---	---	---	---	---	---
21st	---	---	---	---	---	---	---	---	---	---
22nd	---	---	---	---	---	---	---	---	---	---
23rd	---	---	---	---	---	---	---	---	---	---
24th	---	---	---	---	---	---	---	---	---	---
25th	---	---	---	---	---	---	---	---	---	---

SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR of OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Specific Anatomic Structure

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific Injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

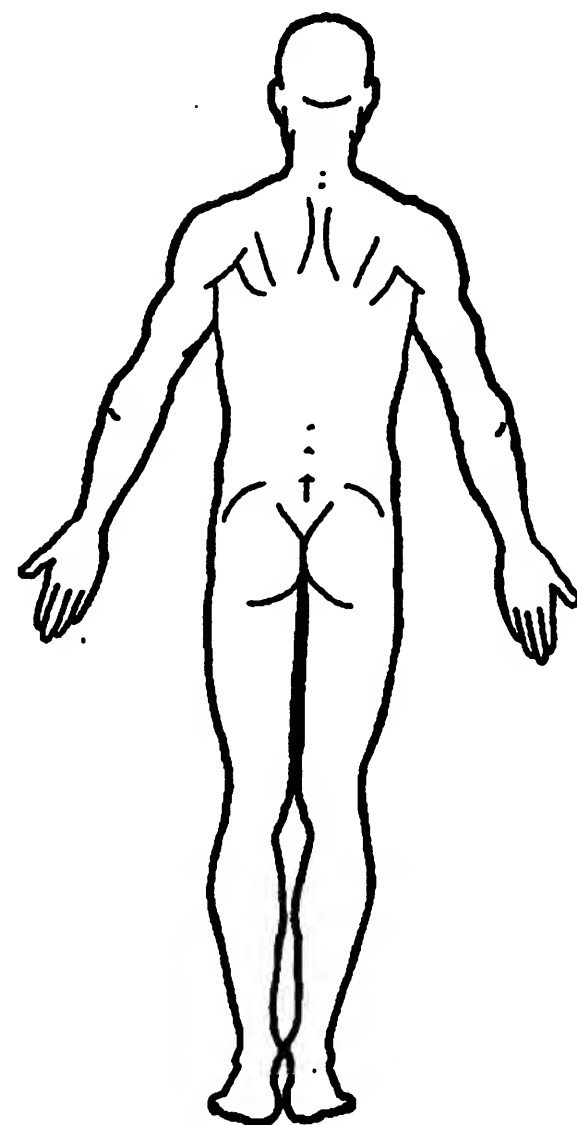
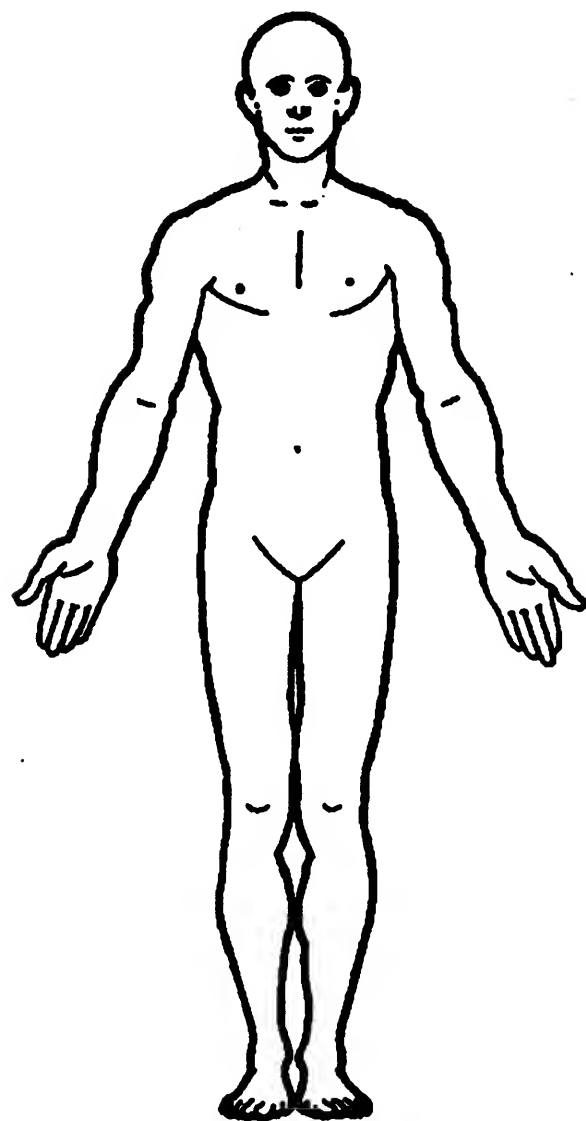
Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — SKELETAL INJURIES

BEST AVAILABLE COPY

Restrained?

___ No

___ Yes

Blood Alcohol Level
(mg/dl)

BAL = ___

Glasgow Coma
Scale Score

GCSS = ___

Units of Blood
Given

Units = ___

Arterial Blood Gases

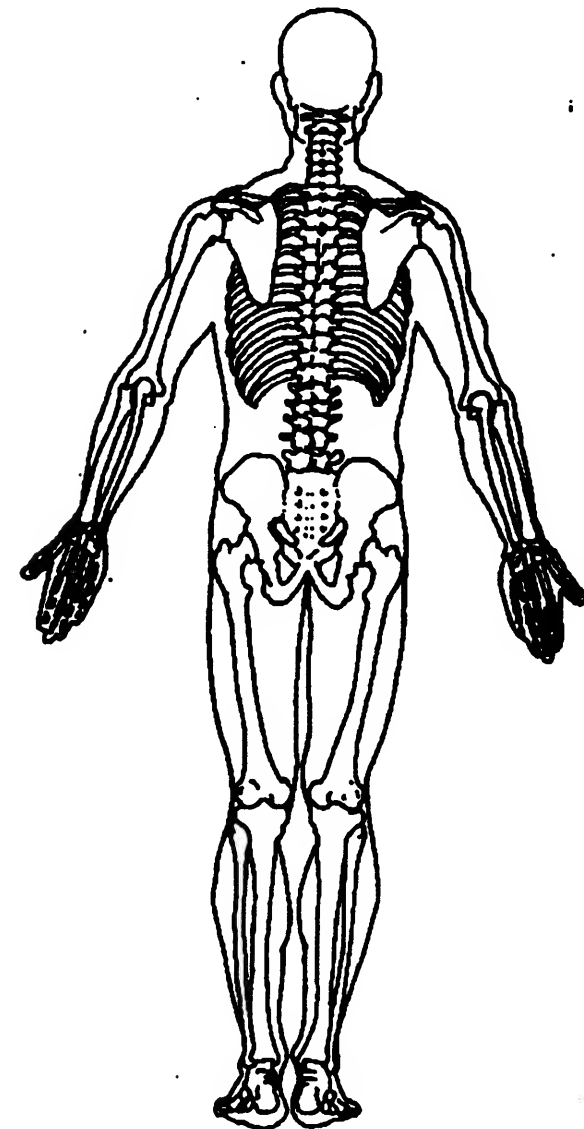
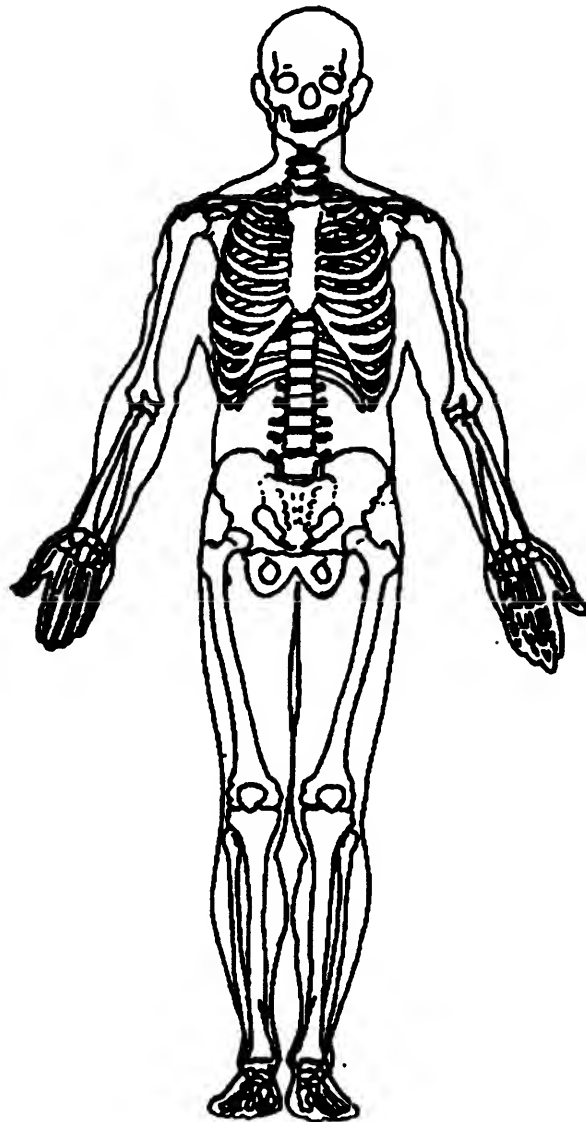
pH = ___

PO₂ = ___

PCO₂ = ___

HCO₃ = ___

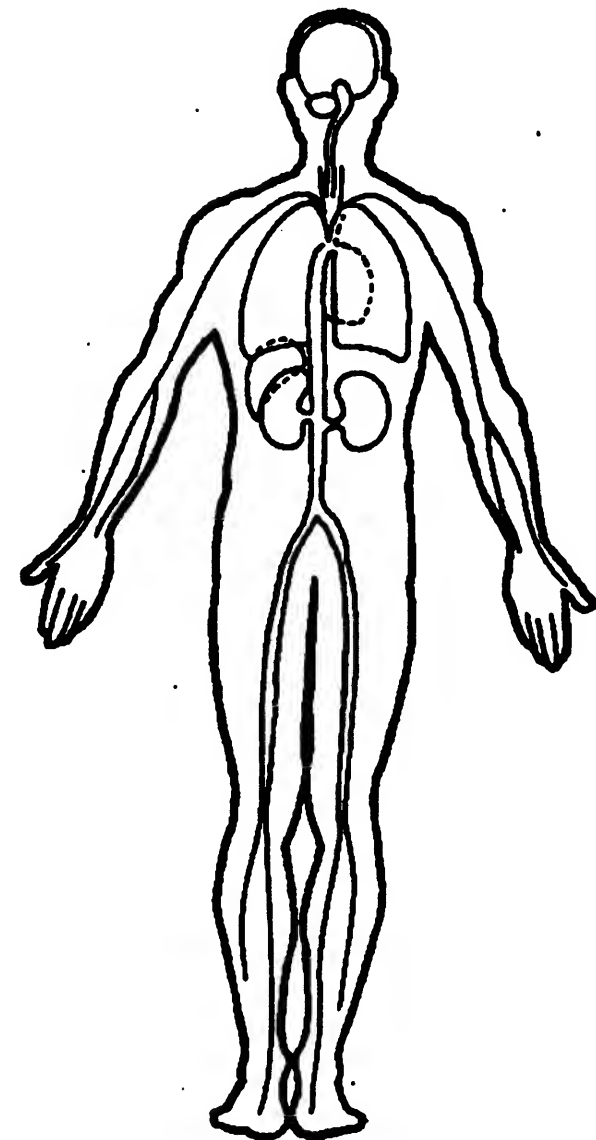
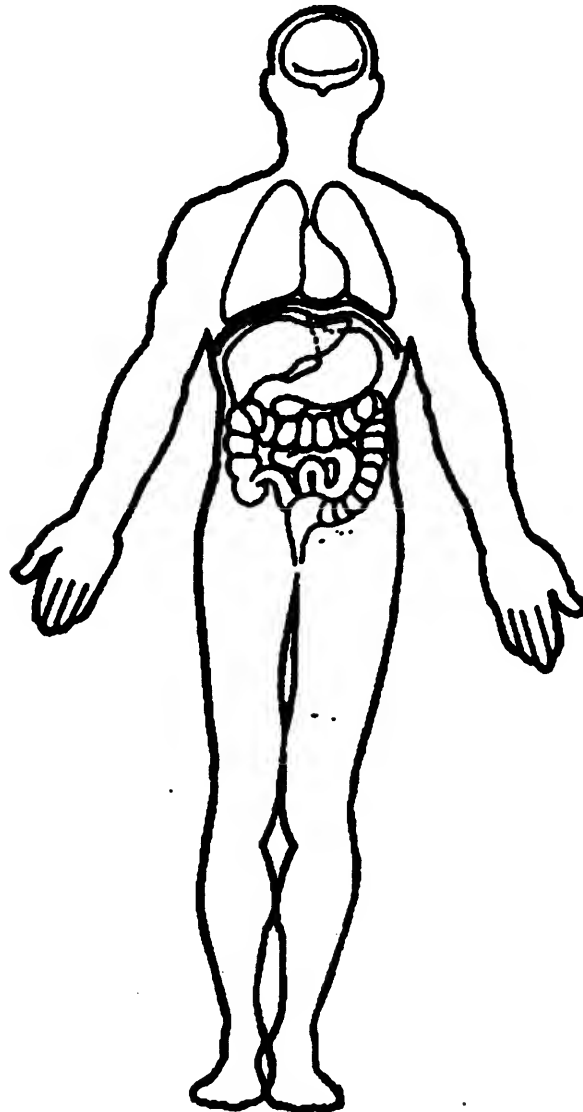
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — INTERNAL INJURIES

BEST AVAILABLE COPY

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



AIRBAG SUPPLEMENT

1

ACCIDENT SUMMARY

1. Accident Date: *SUMMER / WEEKDAY*
2. Police Investigated 1
- (1) Yes
- (2) No
- (3) Unknown
- Agency:
- City:
- County: *[REDACTED], CA*
3. General Locality 2
- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields
4. Configuration (First Harm) 1
- (0) Struck Object or Ped
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Dir.
- (7) Noncollision
- (8) Nonimpact Deployment
- (9) Unknown
5. Fire Involved 0
- (0) None
- (1) Airbag Vehicle
- (2) Other Vehicle
- (3) Both Vehicles
- (9) Unknown
6. Vehicles Involved 2
7. Persons Involved 3
8. Injured Persons 3
9. Maximum AIS in Accident 1

AIRBAG VEHICLE INSPECTION

10. Date Vehicle Inspected: *[REDACTED] 1994*
11. Reason Vehicle Not Inspected 1
- (0) Not Required
- (1) Inspection Completed
- (2) Cannot be Located
- (3) Repaired or Destroyed
- (5) Refusal or Impounded
- (7) Other:
12. Impact Data Obtained 1
- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush, and Trajectory
13. Basis of Delta-V 8
- (0) Not Computed (Unknown why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage + Traj
- (3) OLDMISS
- (4) POLES
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope
- (8) Insufficient Data

VEHICLE HISTORY

14. Prior Impacts for AB Vehicle? 2
- (1) Yes
- (2) No
- (9) Unknown
15. Has Any Prior Maintenance or Service Been Performed on System 2
- (1) Yes
- (2) No
- (9) Unknown

Describe:

AIRBAG SUPPLEMENT

2

AIRBAG VEHICLEFleet: *NONE*VIN: *JTBUZ30C8P0XXXXXX*Mileage: *UNKNOWN***SYSTEM READINESS LAMP**

16. Pre-Impact Lamp Condition 9
 (1) Functioning/Proved Out
 (2) Inoperative
 (9) Unknown
17. Driver's Report of Pre-Impact Flashing 9
 (00) No Flashing Reported
 (01) Continuous Flashing
 (02) _____
 Number of Flashes: _____
 (11)
 (12) Constant Light
 (19) Flashing, Unknown Number
 (88) Not Applicable, System Removed
 (99) Unknown
18. Period of Pre-Impact Flashing 9
 (0) No Flashing
 (1) Same Day as Impact
 (2) Prior Day
 (3) Prior Two Days
 (4) Prior Week
 (5) Prior Month
 (6) Over One Month
 (9) Unknown
19. Post-Impact Lamp Condition 9
 (1) Functioning/Proved Out
 (2) Inoperative
 (9) Unknown
20. Post-Impact Flashing 9
 (00) No Flashing Reported
 (01) Continuous Flashing
 (02) _____
 Number of Flashes: _____
 (11)
 (12) Constant Light
 (19) Flashing, Unknown Number
 (88) Not Applicable, System Removed
 (99) Unknown

21. Airbag Vehicle First Harmful Event 13
 (01) Fire or explosion
 (02) Immersion
 (03) Gas Inhalation
 (04) Fell from vehicle
 (05) Injured in vehicle
 (06) Other noncollision (specify):
 (07) Overturn
 (08) Jackknife
 COLLISION WITH:
 (09) Pedestrian
 (10) Pedalcyclist
 (11) Railway train
 (12) Animal
 (13) Motor vehicle in transport
 (same roadway)
 (14) Motor vehicle in transport
 (other roadway)
 (15) Parked motor vehicle
 (16) Other type nonmotorist (specify):
 (17) Thrown or falling object
 (18) Boulder
 COLLISION WITH FIXED OBJECT
 (20) Building
 (21) Impact attenuator/crash cushion
 (22) Bridge pier or abutment
 (23) Bridge parapet end
 (24) Bridge rail
 (25) Guardrail
 (26) Concrete traffic barrier
 (27) Median barrier
 (28) Other longitudinal barrier (specify):
 (29) Highway/traffic sign post
 (30) Overhead sign support
 (31) Luminaire/light support
 (32) Utility pole
 (33) Other post, pole, or support
 (34) Culvert
 (35) Curb
 (36) Ditch
 (37) Embankment-earth
 (38) Embankment-rock, stone, or concrete
 (39) Fence
 (40) Wall
 (41) Fire hydrant
 (42) Shrubbery
 (43) Tree
 (44) Other fixed object (specify):
 (45) Pavement surface irregularity
 (99) Unknown

AIRBAG SUPPLEMENT

3

AIRBAG VEHICLE IMPACT SUMMARY

22. Vehicle Role 1
 (0) Noncollision
 (1) Striking unit
 (2) Struck unit
 (3) Both striking and struck
 (9) Unknown
23. Manner of Leaving Scene 2
 (1) Driven
 (2) Towed-due to damage
 (3) Towed-not for damage
 (4) Towed-details unknown
 (5) Abandoned
 (9) Unknown
24. Number of Impact Events 2
 (8) 8 or more
 (9) Unknown
25. Rollover φ
 (0) No rollover
 (1) First event
 (2) Subsequent event
 (3) Yes, Unknown event
 (9) Unknown
26. Override/Underride φ
 (0) No override/underride
 (1) Override - 1st CDC
 (2) Override - Other CDC
 (3) Underride - 1st CDC
 (4) Underride - Other CDC
 (9) Unknown

AIRBAG VEHICLE DAMAGE

CODES: (1) Yes, damaged
 (2) No damage
 (9) Unknown

27. Left Front Fender Damage 2
28. Right Front Fender Damage 1
29. Center Top of Grille Damage 1

FRONT BUMPER E.A. STATUS

30. Left 5
31. Right 5
 (1) Normal
 (2) Extended
 (3) Partial Compression
 (4) Complete Compression
 (5) Not Applicable
 (9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

32. Configuration 1
 (0) Struck Object or Ped
 (1) Rear-End
 (2) Head-On
 (3) Rear-to-Rear
 (4) Angle
 (5) Sideswipe-Same Direction
 (6) Sideswipe-Opposite Dir.
 (7) Noncollision
 (8) Nonimpact Deployment
 (9) Unknown
33. CDC: 12FZEW1
34. Object Contacted: 1983 OLDS. CUTLASS

PRIMARY/DEPLOYMENT IMPACT:

35. Event Number 1
36. Total Delta-V UNK
37. Longitudinal Delta-V UNK
38. Configuration 1
 See 32 above for codes
39. CDC: 12FZEW1
40. Object Contacted: 1983 OLDS. CUTLASS

AIRBAG SUPPLEMENT

4

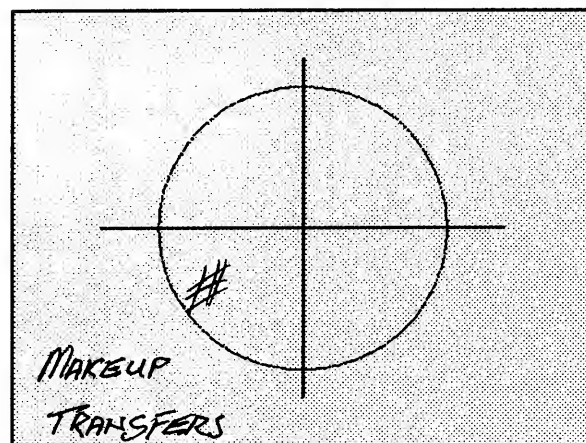
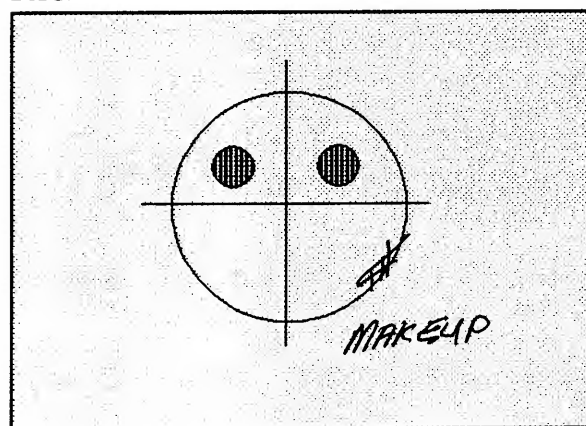
AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged
 (2) No, Intact
 (3) Not Applicable
 (9) Unknown

41. Airbag Module 1
42. Left Front Sensor 9
43. Center Front Sensor 9
44. Right Front Sensor 9
45. Rear Cowl Sensor 2
46. Diagnostic Module 1
47. Wiring 9
48. Knee Diverter 9
49. Indication of disconnected
or loose electrical
connectors 9
50. Condition of Deployed Bag 1
 (1) Bag intact
 (2) Split or torn
 (3) Cut by object in impact
 (4) Cut after accident
 (5) Other
 (8) NA (not deployed)
 (9) Unknown

DESCRIBE SYSTEM AND BAG DAMAGE:

**NOTE DAMAGE AND CONTACT MARKS ON
 AIRBAG DIAGRAMS BELOW:**

FRONT**BACK**

AIRBAG SUPPLEMENT

5

OCCUPANTS OF AIRBAG CAR

51. Number of Occupants in Vehicle

☐ 2

52. Number of Injured Persons

☐ 2

53. Maximum AIS in Airbag Vehicle

☐ 2

(0) No Injury

(1-6) AIS Severity

(7) Injured, unknown severity

(9) Unknown

DRIVER

Age: 57

Sex: FEMALE

54. Number of Driver Injuries

☐ 11

55. Source of Best Injury Data

☐ 2

(0) Not injured

(1) Autopsy

(2) Hospital Medical Records

(3) Emergency Room only

(4) Private physician, clinic

(5) Lay Coroner Report

(6) EMS Personnel

(7) Interviewee

(8) Police

(9) Unknown

MAXIMUM AIS BY BODY REGION

REGION MAX AIS CONTACT

Head/Neck/Face 1 45

Chest _____

Abdomen _____

Legs/Hips _____

Other (Arms) _____

Driver _____

Maximum 1 45**EJECTION**

Extent: NONE

Portal: NONE

OTHER VEHICLE:Maximum AIS 1Prime/Deploy Impact w AB Vehicle
Event Number 01

CDC: UNKNOWN

Total Delta V UNK

Make: OLDSMOBILE

Model Year: 1983

Model: CUTLASS

Body Type: 2-DOOR

NOTES:

AIRBAG SUPPLEMENT

6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown2

Evidence: *ALTHOUGH DIRECT INSPECTION INDICATES SEAT BELT USAGE, SCRATCHING ON BELT TONGUE, OCCUPANT CONTACT TO THE SUNVISOR AND WINDSHIELD HEADER INDICATES NO BELT USAGE*

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did driver brace before crash? Describe:

THE DRIVER REPORTED NORMAL UPRIGHT POSITION

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No2

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

DRIVER'S HUSBAND "THE BAGS SHOULD HAVE SOME FOAM ON THEM. THEY HIT HARD LIKE A PUNCHING BAG."

PASSENGER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown2

Describe:

AIRBAG SUPPLEMENT

7

R/F OCCUPANT**AIRBAG SYSTEM DAMAGE**

CODES: (1) Yes, Damaged
(2) No, Intact
(3) Not Applicable
(9) Unknown

56. Airbag Module

2

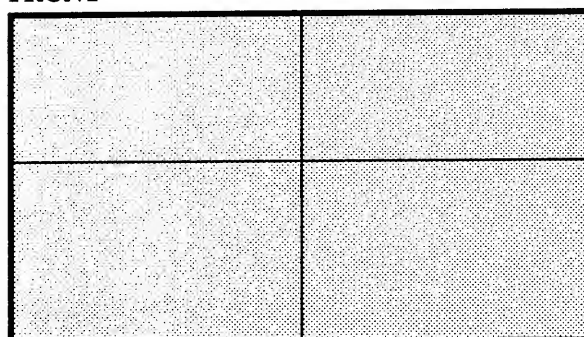
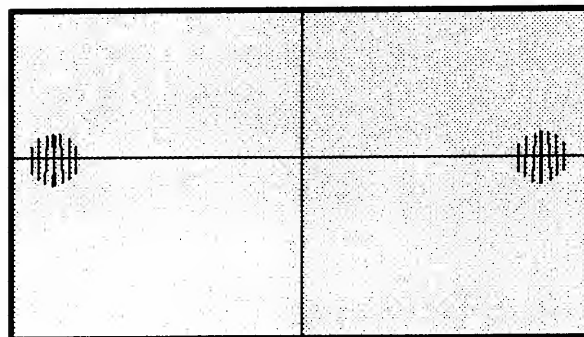
57. Condition of Deployed Bag

- (1) Bag intact
- (2) Split or torn
- (3) Cut by object in impact
- (4) Cut after accident
- (5) Other
- (8) NA (not deployed)
- (9) Unknown

1

DESCRIBE SYSTEM AND BAG DAMAGE:

**NOTE DAMAGE AND CONTACT MARKS ON
AIRBAG DIAGRAMS BELOW:**

FRONT**BACK**

AIRBAG SUPPLEMENT

Age: 60

Sex: MALE

54. Number of Injuries 2

55. Source of Best Injury Data 7

(0) Not injured
 (1) Autopsy
 (2) Hospital Medical Records
 (3) Emergency Room only
 (4) Private physician, clinic
 (5) Lay Coroner Report
 (6) EMS Personnel
 (7) Interviewee
 (8) Police
 (9) Unknown

MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	<u>1</u>	<u>45</u>
Chest	_____	_____
Abdomen	_____	_____
Legs/Hips	_____	_____
Other (Arms)	_____	_____
Maximum	<u>1</u>	<u>45</u>

EJECTION

Extent: NONE

Portal: NONE

AIRBAG SUPPLEMENT

9

R/F OCCUPANT :**R/F OCCUPANT BELT USAGE:** (1) Used (2) Not Used (9) Unknown9

Evidence:

R/F OCCUPANT POSTURE: Any comments Recorded (1) Yes, (2) No1

Describe occupant's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did occupant brace before crash? Describe:

SLEEPING PRIOR TO ACCIDENT

R/F OCCUPANT FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No2

Was occupant wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

R/F OCCUPANT COMMENTS: Comments Recorded (1) Yes, (2) No1

Was the occupant aware that the vehicle was equipped with a supplemental restraint system? Did occupant offer any comments on smoke, noise, etc.? Did the occupant comment on the airbag as a restraint system? Describe:

SAME AS ON PAGE 6

DRIVER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown2

Describe:

TRAFFIC COLLISION REPORT

BOOKING OR CITE NO.		NO INJ. 3		H&R FELONY		CPD		NO.																	
NO KILLED 0		H&R MISO																							
COLLISION OCCURRED ON						DATE DAY YR		TIME (2400)		NCIC NO		OFFICER I.D. NO.													
AT INTERSECTION WITH								TOW AWAY YES NO		STATE HWY. RELATED YES NO															
2 OR FEET/MILES OF																									
PARTY 1		DRIVER'S LICENSE NUMBER				STATE		CLASS		SAFETY EQUIP.		VEH. YR.		MAKE/MODEL/COLOR		LICENSE NUMBER		STATE							
OVER		NAME (FIRST, MIDDLE, LAST)												LEXUS/SC400/											
DESIGN		STREET ADDRESS												GRY											
PARKED VEHICLE		CITY/STATE/ZIP												OWNER'S ADDRESS		SAME AS DRIVER									
CYCLIST		SEX		HAIR		EYES		HEIGHT		WEIGHT		BIRTHDATE DAY YEAR		RACE		DISPOSITION OF VEHICLE ON ORDERS OF									
OTHER		F		BLK		BRN		5-7		145		37		B		OFFICER									
		HOME PHONE				BUSINESS PHONE								PRIOR MECHANICAL DEFECTS: NONE APPARENT				REFER TO NARRATIVE							
		INSURANCE CARRIER				POLICY NUMBER								VIOLATION CHARGED				VEHICLE DAMAGE				SHADE IN DAMAGED AREA			
		DIRECTION OF TRAVEL				ON/ACROSS (STREET OR HIGHWAY)				LANE		SPEED LIMIT													
		E								2		40													
PARTY 2		DRIVER'S LICENSE NUMBER				STATE		CLASS		SAFETY EQUIP.		VEH. YR.		MAKE/MODEL/COLOR		LICENSE NUMBER		STATE							
OVER		NAME (FIRST, MIDDLE, LAST)												OLDS/CUTLASS											
DESIGN		STREET ADDRESS												BLU											
PARKED VEHICLE		CITY/STATE/ZIP												OWNER'S ADDRESS		SAME AS DRIVER									
CYCLIST		SEX		HAIR		EYES		HEIGHT		WEIGHT		BIRTHDATE DAY YEAR		RACE		DISPOSITION OF VEHICLE ON ORDERS OF									
OTHER		M		BRN		BRN		6-0		180		40		W		OFFICER									
		HOME PHONE				BUSINESS PHONE								PRIOR MECHANICAL DEFECTS: NONE APPARENT				REFER TO NARRATIVE							
		INSURANCE CARRIER				POLICY NUMBER								VIOLATION CHARGED				VEHICLE DAMAGE				SHADE IN DAMAGED AREA			
		DIRECTION OF TRAVEL				ON/ACROSS (STREET OR HIGHWAY)				LANE		SPEED LIMIT													
		E								2		40													
PARTY 3		DRIVER'S LICENSE NUMBER				STATE		CLASS		SAFETY EQUIP.		VEH. YR.		MAKE/MODEL/COLOR		LICENSE NUMBER		STATE							
OVER		NAME (FIRST, MIDDLE, LAST)																							
DESIGN		STREET ADDRESS																							
PARKED VEHICLE		CITY/STATE/ZIP												OWNER'S ADDRESS		SAME AS DRIVER									
CYCLIST		SEX		HAIR		EYES		HEIGHT		WEIGHT		BIRTHDATE DAY YEAR		RACE		DISPOSITION OF VEHICLE ON ORDERS OF									
OTHER																OFFICER									
		HOME PHONE				BUSINESS PHONE								PRIOR MECHANICAL DEFECTS: NONE APPARENT				REFER TO NARRATIVE							
		INSURANCE CARRIER				POLICY NUMBER								VIOLATION CHARGED				VEHICLE DAMAGE				SHADE IN DAMAGED AREA			
		DIRECTION OF TRAVEL				ON/ACROSS (STREET OR HIGHWAY)				LANE		SPEED LIMIT													
DESCRIPTION OF DAMAGE																									
OWNER'S NAME		ADDRESS										HOME/BUSINESS TELEPHONE										NOTIFIED			

8-72
S-1
NAME & ADDRESS IDENTIFYING MARKS & CHARACTERISTICS (IF ARRESTED SUSPS. FULL NAME & BK. NO. ONLY)
SUSP. VEH.
OTHER IDENTIFYING FEATURES
S-1
NAME & ADDRESS IDENTIFYING MARKS & CHARACTERISTICS (IF ARRESTED SUSPS. FULL NAME & BK. NO. ONLY)

ITEMS MARKED BELOW WHICH ARE FOLLOWED BY AN ASTERISK (*) SHOULD BE EXPLAINED IN THE NARRATIVE.
PRIMARY COLLISION FACTOR (1ST NUMBER (P) OF PARTY AT FAULT)
TRAFFIC CONTROL DEVICES
TYPE OF VEHICLE
MOVEMENT PROCEEDING COLLISION
A VC SECTION VIOLATED: CITED YES NO
B OTHER IMPROPER DRIVING*
C OTHER THAN DRIVER*
D UNKNOWN*
E FELL ASLEEP*
WEATHER (MARK 1 TO 2 ITEMS)
A CLEAR
B CLOUDY
C RAINING
D SNOWING
E FOG/VISIBILITY FT.
F OTHER*
G WIND
LIGHTING
A DAYLIGHT
B DUSK - DAWN
C DARK - STREET LIGHTS
D DARK - NO STREET LIGHTS
E DARK - STREET LIGHTS NOT FUNCTIONING*
ROADWAY SURFACE
A DRY
B WET
C SNOWY - ICY
D SLIPPERY (MUDDY, OILY, ETC.)
ROADWAY CONDITIONS (MARK 1 TO 2 ITEMS)
A HOLES, DEEP RUTS*
B LOOSE MATERIAL ON RDWY.*
C OBSTRUCTION ON ROADWAY*
D CONSTRUCTION - REPAIR ZONE
E REDUCED ROADWAY WIDTH
F FLOODED*
G OTHER*
H NO UNUSUAL CONDITIONS
A CONTROLS FUNCTIONING
B CONTROLS NOT FUNCTIONING*
C CONTROLS OBSCURED
D NO CONTROLS PRESENT/FACTOR*
TYPE OF COLLISION
A HEAD-ON
B SIDESWIPE
C REAR END
D BROADSIDE
E HIT OBJECT
F OVERTURNED
G VEHICLE/PEDESTRIAN
H OTHER*
MOTOR VEHICLE INVOLVED WITH
A NON-COLLISION
B PEDESTRIAN
C OTHER MOTOR VEHICLE
D MOTOR VEH. ON OTHER ROADWAY
E PARKED MOTOR VEHICLE
F TRAIN
G BICYCLE
H ANIMAL
I FIXED OBJECT
J OTHER OBJECT
PEDESTRIAN'S ACTION
A NO PEDESTRIAN INVOLVED
B CROSSING IN CROSSWALK AT INTERSECTION
C CROSSING IN CROSSWALK - NOT AT INTERSECTION
D CROSSING - NOT IN CROSSWALK
E IN ROAD - INCLUDES SHOULDER
F NOT IN ROAD
G APPROACH/LEAVING SCHOOL BUS
OTHER ASSOCIATED FACTOR (MARK 1 TO 2 ITEMS)
A VC SECTION VIOLATION: CITED YES NO
B VC SECTION VIOLATION: CITED YES NO
C VC SECTION VIOLATION: CITED YES NO
D
E VISION OBSCUREMENT
F INATTENTION*
G STOP & GO TRAFFIC
H ENTERING/LEAVING RAMP
I PREVIOUS COLLISION
J UNFAMILIAR WITH ROAD
K DEFECTIVE VEH. EQUIP: CITED YES NO
L UNINVOLVED VEHICLE
M OTHER*
N NONE APPARENT
O RUNAWAY VEHICLE
SOBRIETY/DRUG PHYSICAL (MARK 1 TO 2 ITEMS)
A HAD NOT BEEN DRINKING
B HBD - UNDER INFLUENCE
C HBD - NOT UNDER INFLU.*
D HBD - IMPAIRMENT UNK.*
E UNDER DRUG INFLU.*
F IMPAIRMENT - PHYSICAL
G IMPAIRMENT NOT KNOWN
H NOT APPLICABLE
I SLEEPY/FATIGUED
SPECIAL INFORMATION
A HAZARDOUS MATERIAL

SKETCH
CENTER DIV.
INDICATE NORTH
POINT OF IMPACT: (DETERMINED BY)
DEBRIS AND SKID MARKS
59 FT N OF S CURB OF
32 FT W OF W CURB OF
TYPE OF CPD VEH OR EQP #
DESCRIBE ITEM AND DAMAGE
DEPT. NAME
ESTIGATED BY
I.D. NUMBER
DIV/W
I.D. NUMBER
DIV/W
NOT TO SCALE
VEHICLE 2
R/F
L/F
R/R
UR
65'
65'
BEST AVAILABLE COPY

INJURED/WITNESS/PASSENGERS/TRAFFIC COLLISION CODING

DATE OF COLLISION		TIME (2400)	NCIC NUMBER	OFFICER I.D.	NUMBER										
SEATING POSITION 1 - DRIVER 2 TO 6 - PASSENGERS 7 - STA. WGN. REAR 8 - RR. OCC. TRK. OR VAN 9 - POSITION UNKNOWN 0 - OTHER 123 456 7		SAFETY EQUIPMENT OCCUPANTS A - NONE IN VEHICLE B - UNKNOWN C - LAP BELT USED D - LAP BELT NOT USED E - SHOULDER HARNESS USED F - SHOULDER HARNESS NOT USED G - LAP/SOULDER HARNESS USED H - LAP/SOULDER HARNESS NOT USED J - PASSIVE RESTRAINT USED K - PASSIVE RESTRAINT NOT USED CHILD RESTRAINT O - IN VEHICLE USED R - IN VEHICLE NOT USED S - IN VEHICLE USE UNKNOWN T - IN VEHICLE IMPROPER USE U - NONE IN VEHICLE M/C BICYCLE-HELMET DRIVER Y - NO W - YES PASSENGER X - NO Y - YES			EJECTED FROM VEH. 0 - NOT EJECTED 1 - FULLY EJECTED 2 - PARTIALLY EJECTED 3 - UNKNOWN										
WITNESS ONLY	PASSENGER ONLY	AGE	SEX	EXTENT OF INJURY ("X" ONE)		INJURED WAS ("X" ONE)					PARTY NUMBER	SEAT POS.	SAFETY EQUIP.	EJECTED	
FATAL INJURY	SEVERE INJURY	OTHER VISIBLE INJURY	COMPLAINT OF PAIN	DRIVER	PASS.	PED.	BICYCLIST	OTHER							
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1	GL	0		
NAME / D.O.B.				(INJURED ONLY) TRANSPORTED BY:					TAKEN TO:						
ADDRESS				-37					HOSP.						
TELEPHONE				HOME/BUSINESS											
DESCRIBE INJURIES															
1) 1/2" CUT UNDER RIGHT EYE															
2) SORE FACE AND HEAD															
3) STIFF RIGHT LEG															
<input type="checkbox"/>	<input checked="" type="checkbox"/>	60	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	3	GL 0	
NAME / D.O.B.				(INJURED ONLY) TRANSPORTED BY:					TAKEN TO:						
ADDRESS				-33					N/A						
TELEPHONE				HOME/BUSINESS											
DESCRIBE INJURIES															
1/2" CUT ON FOREHEAD / TREATMENT REFUSED.															
VICTIM OF VIOLENT CRIME NOTIFIED															
<input type="checkbox"/>	<input type="checkbox"/>	53	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	1	H 0	
NAME / D.O.B.				(INJURED ONLY) TRANSPORTED BY:					TAKEN TO:						
ADDRESS				-40					HOSP.						
TELEPHONE				HOME/BUSINESS											
DESCRIBE INJURIES															
COMPLAINT OF NECK PAIN.															
VICTIM OF VIOLENT CRIME NOTIFIED															
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
NAME / D.O.B.				(INJURED ONLY) TRANSPORTED BY:					TAKEN TO:						
ADDRESS															
TELEPHONE				HOME/BUSINESS											
DESCRIBE INJURIES															
VICTIM OF VIOLENT CRIME NOTIFIED															
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
NAME / D.O.B.				(INJURED ONLY) TRANSPORTED BY:					TAKEN TO:						
ADDRESS															
TELEPHONE				HOME/BUSINESS											
DESCRIBE INJURIES															
VICTIM OF VIOLENT CRIME NOTIFIED															
PREPARED BY				I.D. NUMBER		DIV./WATCH		REVIEW - APPROVED BY				I.D. NUMBER		DIV./WATCH	
1 OFFICER															

ARRATIVE/SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER	
DATE OF ORIGINAL INCIDENT	TIME (2400)	NCIC NUMBER		OFFICER NO.	L.B.P.D. NUMBER
COUNTY/JUDICIAL DISTRICT		REPORTING DISTRICT (BEAT)			CITATION NUMBER
TITLE/ISSUE					
DATE REPORTED		TIME OF DISPATCH (2400)		TIME OF ARRIVAL (2400)	

OFC. AND I WERE WORKING UNIFORMED
CONTROL AS UNIT WE WERE DISPATCHED TO
TO HANDLE AN INJURY TRAFFIC ACCIDENT.
UPON ARRIVAL, VEHICLE #1 WAS STOPPED IN THE #1
LANE OF DR. EAST OF AV. NEXT TO
THE CENTER DIVIDER. VEHICLE #2 WAS STOPPED IN
THE INTERSECTION OF AV.
MOVING EAST.

BOTH DRIVERS WERE STILL IN THE DRIVER'S SEATS OF
THEIR VEHICLES AS PARAMEDICS ATTENDED TO THEM.
PASSENGER WAS STANDING AT THE REAR OF
VEHICLE #1.

I BRIEFLY INSPECTED THE VEHICLES AND FOUND NO
EVIDENCE OF MECHANICAL ERROR. BOTH DRIVERS STATED
THEIR VEHICLES HAD NO PRIOR MECHANICAL DEFECTS. THE
TWO DRIVERS BOTH HAD VALID NON-COMMERCIAL
LICENSES. DRIVER #1 IS REQUIRED TO WEAR
CORRECTIVE LENSES AND HAD HER CONTACTS IN AT THE
TIME OF THE ACCIDENT.

BOTH OF VEHICLE #1'S AIRBAGS DEPLOYED INDICATING
A FRONTAL COLLISION. VEHICLE #1 HAD MODERATE
FRONT END DAMAGE AND VEHICLE #2 HAD MAJOR
FRONT END DAMAGE. THE LEFT REAR TIRE OF VEHICLE

REPORTER'S NAME	I.D. NUMBER	MO. DAY YR.	REVIEWER'S NAME	MO. DAY YR.
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ARRATIVE/SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER	
DATE OF ORIGINAL INCIDENT	TIME (2400)	NCIC NUMBER	OFFICER NO	LB PD NUMBER	
CITY/COUNTY/JUDICIAL DISTRICT		REPORTING DISTRICT/BEAT		CITATION NUMBER	
LOCATION/SUBJECT					
DATE REPORTED		TIME OF DISPATCH (2400)		TIME OF ARRIVAL (2400)	

#2 LEFT A SKID MARK FROM THE POINT OF IMPACT TO ITS FINAL POINT OF REST.

DRIVER #1, RECEIVED A 1/2" CUT UNDER HER RIGHT EYE FROM THE AIRBAG AND COMPLAINED OF PAIN STIFFNESS IN HER HEAD, FACE, AND RIGHT LEG. DRIVER #2, COMPLAINED OF NECK PAIN. BOTH DRIVERS WERE TREATED BY PARAMEDICS FROM AND TRANSPORTED TO HOSPITAL BY PASSENGER RECEIVED A 1/2" CUT ON HIS FOREHEAD FROM THE AIRBAG. HE REFUSED TREATMENT, BUT RODE TO THE HOSPITAL IN THE AMBULANCE WITH DRIVER #1. TREATED BOTH DRIVERS.

DRIVER #1, STATED SHE HAD ONE GLASS OF WINE EARLIER IN THE NIGHT, BUT DID NOT REMEMBER EXACTLY WHEN. I DID NOT SMELL THE ODOR OF ALCOHOL ON HER. I WAS UNABLE TO EVALUATE FURTHER BECAUSE THE PARAMEDICS SECURED HER TO A BACKBOARD DUE TO HER INJURIES.

I SPOKE WITH DRIVER #1, WHO TOLD ME THE FOLLOWING. SHE WAS DRIVING EASTBOUND ON APPROACHING A STREET WHICH SHE COULD NOT REMEMBER THE NAME OF. AS DROVE IN THE CENTER LANE, HER AIRBAG SUDDENLY INFLATED. SHE

PREPARER'S NAME	I.D. NUMBER	MO DAY YR	REVIEWER'S NAME	MO DAY YR
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CHECK ONE <input checked="" type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER	
ARRATIVE/SUPPLEMENTAL			
DATE OF ORIGINAL INCIDENT	TIME (2400)	NCIC NUMBER	OFFICER NO
CITY/COUNTY/JUDICIAL DISTRICT		REPORTING DISTRICT (BEAT)	CITATION NUMBER
LOCATION/SUBJECT			
DATE REPORTED		TIME OF DISPATCH (2400)	TIME OF ARRIVAL (2400)

DID NOT KNOW WHY THIS HAPPENED OR REMEMBER -
ANYTHING ELSE ABOUT THE ACCIDENT.

I SPOKE WITH PASSENGER _____ WHO TOLD ME
THE FOLLOWING. HE STATED, "I DON'T KNOW WHAT
HAPPENED." _____ WAS ASLEEP AND WOKE UP WHEN
THE AIRBAG DEPLOYED.

DRIVER #2, _____, WAS TRANSPORTED TO THE
HOSPITAL BEFORE I COULD INTERVIEW HIM. WE WENT TO
_____ HOSPITAL AND SPOKE WITH _____ WHO
TOLD US THE FOLLOWING. HE WAS IN THE CENTER LANE
OF _____ WAITING FOR THE RED LIGHT
TO CHANGE. APPROXIMATELY THREE SECONDS AFTER HE
STOPPED, HIS VEHICLE WAS HIT FROM BEHIND BY
ANOTHER CAR. HE DID NOT HEAR OR SEE THE CAR
COMING BEFORE THE COLLISION.

BASED ON THE ABOVE FACTS I HAVE FORMED THE
FOLLOWING OPINIONS AND CONCLUSIONS. VEHICLE #1, WHILE
DRIVING EASTBOUND ON _____ APPROACHING _____, DID
NOT SLOW DOWN TO A SAFE SPEED TO AVOID A
COLLISION WITH VEHICLE #2, WHICH HAD STOPPED FOR THE
RED LIGHT. THIS WAS IN VIOLATION OF _____.

BOTH VEHICLES WERE TOWED FROM THE SCENE. FOR
FURTHER, REFER TO _____ AND _____

PREPARER'S NAME	I.D. NUMBER	MO DAY YR.	REVIEWER'S NAME	MO DAY YR.
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ACTUAL DIAGRAM

DATE OF COLLISION

TIME (2400)

NCIC NUMBER

OFFICER I.D.

NUMBER

MO

ALL MEASUREMENTS ARE APPROXIMATE AND NOT TO SCALE UNLESS STATED (SCALE)



INDICATE NORTH

CENTER DIVIDER

V-1



V-2



DEBRIS

SIGNAL

SIGNAL

NOT TO SCALE

REPORTER'S NAME

I.D. NUMBER

MO DAY YR

REVIEWER'S NAME

NARRATIVE/SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		CHECK ONE <input checked="" type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER	
DATE OF ORIGINAL INCIDENT	TIME (2400)	NCIC NUMBER	OFFICER NO	L.B. PD NUMBER	
CITY/COUNTY/JUDICIAL DISTRICT		REPORTING DISTRICT/BEAT		CITATION NUMBER	
LOCATION/STATE					
DATE REPORTED		TIME OF DISPATCH (2400)		TIME OF ARRIVAL (2400)	
MO.					

LEGEND

POINTS OF REST

V-1: R/F - 128' E OF E CURB OF
68' N OF S CURB OF

R/R - 118' E OF E CURB OF
68' N OF S CURB OF

V-2: R/F 19' W OF E CURB OF
42' N OF S CURB OF
R/R 28' W OF E CURB OF
44' N OF S CURB OF

PREPARED BY'S NAME

I.D. NUMBER

MO DAY, YR.

REVIEWER'S NAME

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ANALYSIS OF RECORD

Written By: ...
Client Co.:

Insured:

3

Address:

Date of Loss:

Type of Loss:

Day:

Point Of Impact: 1 RIGHT FRONT

Other:

0

Inspect:

Location:

Field

Repair:

Facility:

30 Days to Repair

(93) LEXU SC 400 2D LT TEAL 8-4.0L-FI

VIN: Lic. #:

Prod. Date: Mileage:???

Automatic transmission	Power steering	Power brakes
Power windows	Power locks	Power driver seat
Power passenger seat	Power antenna	Power mirrors
Tinted glass	Body side moldings	Dual mirrors
Air conditioning	Rear defogger	Tilt wheel
Cruise control	Telescopic wheel	Climate control
Keyless entry	Theft deter/alarm	Am radio
Fm radio	Stereo	Cassette
Search/seek	Anti-lock brakes (4)	Driver airbag
4 wheel disc brakes	Leather seats	Bucket seats
Recline/lounge seats	Alloy wheels	Clear coat paint
California emissions		

NO.	REPR/ REPL	DAMAGE ANALYSIS	QTY	PART COST	LBR PAINT		MISC
					HRS	HRS	
1		FRONT BUMPER & LAMPS					
2		O/H Front Bumper	1	0.00	4.0	0.0	
3	Repl	Cover	1	291.57	Incl	3.0	
4	Repl	Cover clip	1	1.20	0.0	0.0	
5	Repl	Energy absorber	1	58.24	Incl	0.0	
6	Repl	Impact bar	1	254.50	Incl	0.0	
7	Repl	Reinforcement	1	80.72	Incl	0.0	

93 LEXU 8C 400 2D LT TEAL 8-4.0L-FI

NO.	REPR/ REPL	DAMAGE ANALYSIS	QTY	PART COST	LER HRS	PAINT HRS	MISC
8	Repl	Retainer upper center	1	23.85	Incl	0.0	
9	Repl	Retainer upper side	1	11.44	Incl	0.0	
10	Repl	Retainer upper clip (10)	1	1.08	0.0	0.0	
11	Repl	Retainer lower center no. 1	1	9.91	Incl	0.0	
12	Repl	Retainer lower center no. 2	1	18.32	Incl	0.0	
13	Repl	Rtnr lwr cntr n. 2 clip	1	1.39	0.0	0.0	
14	Repl	Retainer lower center no. 3	1	11.44	Incl	0.0	
15	Repl	Retainer lower side	1	6.14	Incl	0.0	
16	Repl	Spoiler	1	213.50	1.0	0.5	
17	Repl	RT Retainer upper side	1	11.29	0.0	0.0	
18	Repl	Retainer upper center	1	38.31	0.0	0.0	
19	Repl	Retainer lower	1	14.71	0.0	0.0	
20	Repl	AC temp sensor	1	33.99	0.0	0.0	
21	Repl	AC temp sensor retainer	1	1.20	0.0	0.0	
22	Repl	RT Driving lamp assy	1	133.19	Incl	0.0	
23	Repl	RT Inner clip	1	0.82	0.0	0.0	
24	Repl	RT Cornering lamp assy to 5/93	1	45.81	Incl	0.0	
25	Repl	RT Side marker lamp assy	1	27.35	Incl	0.0	
26		FRONT LAMPS					
27	Repl	LT Headlamp assy	1	327.05	Incl	0.0	
28	Repl	RT Headlamp assy	1	323.97	Incl	0.0	
29	Repl	Aim headlamps	1	0.00	0.5	0.0	
30		COOLING					
31	Repl	Rad Support As Assembly	1	0.00	8.0	0.0	
32*	Repl	Support assy	1	0.00	Incl	Incl	
33*	Repl	Radiator assembly from 3/92	1	503.17	Incl	0.0	
34	Repl	LT Rdtr assembly spprt uppr	1	10.27	0.0	0.0	
35	Repl	RT Rdtr assembly spprt uppr	1	10.48	0.0	0.0	
36	Repl	Rdtr assembly spprt lwr	1	8.49	0.0	0.0	
37*	Repl	Upper tie bar	1	191.18	Incl	Incl	
38		Paint Rad Support Complete	1	0.00	0.0	1.5	
39*	Repl	Lower tie bar	1	128.12	Incl	Incl	
40	Repl	RT Side panel	1	74.15	Incl	0.0	
41	Repl	Cover plate	1	31.36	0.0	0.0	
42	Repl	Upper air deflector	1	105.33	0.0	0.0	
43		Repl Motor Fan & Shroud	1	0.00	2.0	0.0	
44*	Repl	Hydraulic fan motor	1	273.87	Incl	0.0	
45*	Repl	Hydraulic fan motor fan blade	1	95.50	Incl	0.0	
46*	Repl	Hydraulic fan motor shroud	1	70.98	Incl	0.0	
47		AIR COND & HEATER					
48*	Repl	Condenser	1	393.38	3.7	0.0 M	
49*	Repl	AC service	1	0.00	1.4	0.0 M	
50*		REPLACE FREON	1	0.00	0.0	0.0 T	24.00

93 LEXU 8C 400 2D LT TEAL 8-4.0L-FI

NO.	REPR/ REPL	DAMAGE ANALYSIS	QTY	PART COST	LBR HRS	PAINT HRS	MISC
51*	Repl	Hose discharge	1	59.52	2.0	0.0	M
52*	Repl	Hose suction	1	88.02	Incl	0.0	
53		HOOD					
54	Repl	Hood	1	417.27	1.5	4.0	
55		Add for Underside	1	0.00	0.0	2.0	
56	Repl	Insulator	1	199.85	Incl	0.0	
57	Repl	Insulator retainer	1	2.94	0.0	0.0	
58	Repl	Insulator clip (13)	1	1.34	0.0	0.0	
59	Repl	Lock assembly	1	39.35	0.3	0.0	
60	Repl	RT Hinge	1	28.74	0.3	0.3	
61		FENDER & LAMPS					
62	Repl	RT Fender	1	282.77	2.5	3.0	
63		Overlap Major Adjacent Panel	1	0.00	0.0	-0.4	
64		Add for Edging	1	0.00	0.0	0.5	
65		Deduct for Body Overlap	1	0.00	-0.4	0.0	
66	Repl	RT Mud guard	1	36.25	0.3	0.0	
67*	Repl	RT Apron assembly	1	447.83	9.5	1.5	
68		LT Fender R&I	1	0.00	2.0	0.0	
69		FRAME					
70*	Repr	RT Side rail assembly AFT/PULL	1	0.00	<u>10.0</u>	1.5	
71*		R&I NECC.PARTS FOR ACCESS	1	0.00	<u>3.0</u>	0.0	M
72		WHEELS & FRONT SUSPENSION					
73*	Repl	RT/Front Wheel, 18 X 7	1	897.80	0.3	0.0	
74*		O/H Front Suspension Rt	1	0.00	4.5	0.0	M
75*	Repl	RT O/H Suspension	1	0.00	Incl	0.0	
76*	Repl	RT Steering knuckle	1	161.47	Incl	0.0	
77*	Repl	RT Control arm upper	1	217.94	Incl	0.0	
78	Repl	RT Control arm upper bolt	1	5.70	0.0	0.0	
79*	Repl	RT Control arm lower	1	354.35	Incl	0.0	
80*	Repl	RT Shock absorber assy	1	42.02	Incl	0.0	
81*	Repl	Wheel alignment front wheel	1	0.00	<u>0.0</u>	0.0	X <u>85.00</u>
82*	Repl	RT Splash shield	1	25.58	Incl	0.0	
83		STEERING GEAR					
84*	Repl	RT Tie rod outer end	1	89.11	1.0	0.0	M
85		COWL & WINDSHIELD					
86*	Repl	Section RT Hinge pillar outer	1	120.61	<u>3.0</u>	1.0	
87*	Repr	RT Reinforcement lower	1	0.00	<u>3.0</u>	0.5	
88	Repl	RT Reveal mouldings side	1	45.93	0.5	0.0	
89*	Repr	Rear view mirror ADJUST	1	<u>0.00</u>	<u>0.5</u>	0.0	
90		RESTRAINT SYSTEMS					
91*	Repl	Air bag module driver side	1	1249.82	0.5	0.0	M
92*	Repl	Air bag module passenger side	1	1858.14	1.0	0.0	M
93*	Repl	LT Sensor	1	193.34	1.3	0.0	M

93 LEXU 8C 400 2D LT TEAL 8-4.0L-FI

NO.	REPR/ REPL	DAMAGE ANALYSIS	QTY	PART COST	LBR HRS	PAINT HRS	MISC
94*	Repl	RT Sensor	1	193.34	1.3	0.0	M
95*		Diagnosis control DIAGNOSIS	1	0.00	1.0	0.0	M
96		FRONT DOOR					
97		RT Front door R&I	1	0.00	1.3	0.0	
98	Repl	RT Hinge assembly	1	288.84	0.4	0.3	
99*		COLOR MATCH	1	0.00	1.0	0.0	
100*		BLEND RT DOOR	1	0.00	1.0	0.0	
101*		BLEND LT DOOR	1	0.00	1.0	0.0	
102*		COVER CAR	1	7.50	0.5	0.0	
103*		COLOR SAND AND POLISH	1	0.00	2.0	0.0	
104*		SET-UP UNIBODY	1	0.00	3.0	0.0	F
105*		PULL AND SQUARE SIDESWAY	1	0.00	3.0	0.0	F
106*		PULL AND SQUARE MAJOR MASH	1	0.00	4.0	0.0	
107*		UNDERCOAT AND SEAL	1	0.00	0.5	0.0	T 10.00
108*		*ADDITIONAL PARTS AND LABOR*					
109*		*AFTER TEAR DOWN*	1	0.00	0.0	0.0	
110		ENGINE					
111*		R&I Engine assy	1	0.00	14.0	0.0	M
112*	Repl	Mount front	1	110.94	1.2	0.0	M
113*	Repl	Mount rear	1	53.91	1.2	0.0	M
114*	Repl	LT Bracket front	1	33.78	Incl	0.0	
115*	Repl	RT Bracket front	1	33.78	Incl	0.0	
116		COWL & WINDSHIELD					
117*	Repr	Cowl top panel	1	0.00	2.0	1.0	
118		ROOF & BACK GLASS					
119		R&I Glass assembly	1	0.00	1.0	0.0	
120*	Repr	Roof panel w/moon roof	1	0.00	2.0	3.5	
121		Overlap Major Adjacent Panel	1	0.00	0.0	-0.4	
122		FRAME					
123*	Repl	RT Side rail assembly front	1	778.98	9.3	1.5	F
124		ENGINE					
125*	Repl	Air intake assy	1	293.17	Incl	0.0	
126*	Repl	Inlet duct	1	88.77	0.5	0.0	M
127		FRAME					
128	Repl	Engine splash shield front	1	45.10	0.5	0.0	
129	Repl	RT Engine splash shield side	1	31.88	0.5	0.0	
130	Repl	Engine splash shield rear	1	124.83	0.5	0.0	
131		WHEELS & FRONT SUSPENSION					
132*	Repl	Suspension X-mem front	1	839.42	5.0	0.0	M
133*		LT R&I Suspension	1	0.00	3.5	0.0	M
134*		CLEAR COAT	1	0.00	0.0	2.5	
Subtotals ==>				13402.85	129.9	27.3	119.00

93 LEXU SC 400 2D LT TEAL 8-4.0L-FI

OPEN:ADDITIONAL RT FRONT SUSPENSION.

Parts		13402.65
Labor	63.3 hrs @ 28.00/hr	1912.40
Paint	27.3 hrs @ 28.00/hr	764.40
Paint/Materials		375.00
Frame	15.5 hrs @ 40.00/hr	620.00
Mech	48.1 hrs @ 55.00/hr	2535.50
Sublet/Misc		119.00
SUBTOTAL		\$ 19728.95
Tax on \$ 13611.65 at 8.2500%		1139.46
TOTAL COST OF REPAIRS		\$ 20868.41
NET COST OF REPAIRS		\$ 20868.41

THIS IS NOT AN AUTHORIZATION FOR REPAIR. THIS IS AN APPRAISAL OF DAMAGES ONLY. NO APPRAISER OR ADJUSTER HAS AUTHORITY TO AUTHORIZE REPAIRS. AUTHORIZATION TO REPAIR AND GUARANTEE OF PAYMENT CAN ONLY BE MADE BY OWNER. [REDACTED] SPECIFIES AND INTENDS THAT ALL REPAIRS AND/OR REPLACEMENTS LISTED HEREON BE MADE IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. [REDACTED] AND/OR ITS CLIENT ASSUMES NO RESPONSIBILITY FOR REPAIR QUALITY AND SAFETY. SUPPLEMENTAL REPAIRS ARE SUBJECT TO REINSPECTION AND WILL NOT BE HONORED UNLESS PRIOR APPROVAL GIVEN.

Estimate based on MOTOR CRASH ESTIMATING GUIDE. Non-asterisk(*) items are derived from the Guide [REDACTED] Database Data [REDACTED]

Double asterisk(**) items indicate part supplied by a supplier other than the original equipment manufacturer.

EZEst - A product of CCC Information Services Inc.

ADMISSION REC

Remit To:

3

ACCOUNT NO.		ADMISSION DATE/TIME		FC	DATE OF BIRTH		AGE	SEX	RACE	MS	SERVICE	STATION	ROOM NO.	ACC	PAT TYPE	INIT	UNIT NUMB		
PATIENT	PATIENT NAME AND ADDRESS										SOC-SEC-NO		PATIENT EMPLOYER		S		ACU	PAB	UNIT NUMB
	GUARANTOR NAME AND ADDRESS										TELEPHONE NO		GUARANTOR EMPLOYER				HOW LONG		TELEPHONE NO
	SPOUSE										RELATION		RELATIVE				OCCUPATION		HOW LONG
	INSURANCE 1										INSURANCE 2		INSURANCE 3		INSURANCE 4				
GUARANTOR	INSURANCE 1										INSURANCE 2		INSURANCE 3		INSURANCE 4				
	INSURANCE 1										INSURANCE 2		INSURANCE 3		INSURANCE 4				
DIAGNOSIS/COMPLAINT																			
ACUTE BILATERAL HYPHENA																			
ADMITTING PHYSICIAN																			
PREVIOUS ADMIT NAME																			
ATTENDING PHYSICIAN																			
ADVANCE DIRECTIVE																			
REFERRING PHYSICIAN																			
FAMILY PHYSICIAN																			
ACCIDENT WK. REL																			
YES																			
MOTOR VEHICLE ACCIDENT																			
DATE/TIME																			
ADM TYPE/SOURCE																			
1 7																			
ARRIVAL MODE																			
CENCT																			
SMK/PUB/VAL																			
N N																			
PAT. CLA																			
ROOM PREF																			
CHURCH																			
FINAL DIAGNOSIS:																			
DL#:																			
Ins Notes? NO																			
ROI: Yes																			

SECONDARY DX:

COMPLICATIONS:

PROCEDURES:

CAUSE OF DEATH:

CONDITION ON DISCHARGE:

CODE NO.

921.3

871.4

E81.20
780.52

ATTENDING PHYSICIAN

MD.

Emergency Department Patient Record

CHIEF COMPLAINT: STATUS-POST MOTOR VEHICLE ACCIDENT WITH EYE PAIN.

HISTORY OF PRESENT ILLNESS: This patient is a 57-year-old Black female who was the driver of a motor vehicle accident with shoulder harness and seatbelt in place. The patient was travelling around a corner in the process of making a right turn when she ran into another car. Her vehicle's airbag inflated causing the patient to lose vision. The patient did not lose consciousness. The patient was brought into the emergency department in cervical spine precautions complaining in of bilateral eye pain and inability to see. The patient also notes that she had hard contact lenses in place at the time of the injury. The patient denies any pain in her back at this time. She is complaining of pain in her neck. She also denies pain in her chest, abdomen, or extremities. She is complaining of swelling in her left upper lip. The patient denies any facial numbness or weakness.

PAST MEDICAL HISTORY: The patient denies any other medical problems.

MEDICATIONS: NONE.

ALLERGIES: IODINE.

PHYSICAL EXAM:

GENERAL: The patient is well-developed, well-nourished, Black female who is lying supine in full, spinal precautions.

SKIN: Warm and dry.

HEENT: Head - Normocephalic, atraumatic without palpable deformities. Eyes - The patient has bilateral edema of the eyes with abrasions of the lower lids. Glass and plastic are visible in her lids and lashes. Examination of the left eye - The patient had hand motion vision at approximately 12-inches. Her cornea is cloudy with blood visible posterior to the cornea and the pupil is obscured by blood in the anterior chamber. The pupil appears indistinctly but does appear to be approximately 4-mm. and round. The funduscopy was not able to be accomplished secondary to the increased density of the anterior chamber. The patient had some sloughing across the anterior cornea with broken pieces of hard contact in the conjunctival sac above the left upper lid. The patient also has chemosis of the conjunctivae with a left lateral subconjunctival hemorrhage. The lids and lashes appear intact. There does not appear to be any rupture of the globe. Examination of the right eye - The patient has count finger vision at 12-inches. Again, she has broken pieces of plastic and glass in the lids and lashes, within the conjunctival sac, and underneath the right lid. The patient had an asymmetric eccentric pupil with the pupil indistinctly seen again secondary to increased density behind the cornea. The patient's pupil appears elliptical and displaced upward with a lenticular shaped disruption of the iris at between 7 and 8 o'clock. There is no obvious site of penetration of the globe itself. The patient, again, has chemosis of the conjunctivae with a right lateral subconjunctival hemorrhage and edema. The funduscopy examination was not done secondary to inability to visualize past the increased density behind the cornea. Ears - Canals patent. Tympanic membranes are clear. No Battle's sign. Nose/Face - Atraumatic. There is no septal hematoma. Facial bones are nontender to palpation and stable with attempts at manipulation. Mouth/Throat - The teeth are intact. The patient has soft tissue

swelling and edema with ecchymosis of the mucosal surface of the left upper lip but no suturable laceration. Neck - The patient had generalized soreness but no localized tenderness. The trachea was midline. Carotids were equal. The range of motion was tested after x-rays were taken and this was normal.

CHEST: Nontender without crepitus or deformity. Excursions are normal. Lungs with good tidal volume. There are normal breath sounds bilaterally.

HEART: Regular rate and rhythm. Tones are normal. No murmur, rub or gallop is heard. All peripheral pulses are intact and equal.

ABDOMEN: Nondistended without abrasions or ecchymoses. No tenderness. No guarding or rebound. No masses. Bowel sounds are active.

PELVIS: Nontender to palpation and stable to compression.

EXTREMITIES: Full range of motion without pain. No ecchymoses, cyanosis, clubbing or edema. Distal motor, neurovascular supply intact.

NEUROLOGIC: Alert and oriented x 4. Glasgow Coma Scale 4-6-5. Cranial nerves II - XII intact. Motor and sensory exam is non-focal. Reflexes are symmetric. No pathological reflexes elicited.

EMERGENCY DEPARTMENT COURSE: The patient had x-rays of her cervical spine taken - this was a limited series. This was done secondary to the mechanism of injury. However, the patient's x-rays were negative and the patient is complaining of generalized discomfort only. On examination of her eyes, the patient had Ophthaine drops instilled into the eyes to facilitate the eye examination. Irrigation with sterile saline was done to remove debris, dirt, and plastic pieces of her contact lens. The patient had lid inversions done bilaterally to further remove pieces of broken plastic contact lens. This patient appears to have a bilateral hyphema with tear of the iris at 7 o'clock in the right eye. These findings were discussed with [REDACTED] the ophthalmologist on-call who agrees that the patient should be admitted for bedrest, patching bilaterally and IV-sedation and pain relief. These findings were discussed with the patient and her husband. The patient's own personal ophthalmologist was consulted. He does not have admitting privileges, here, at [REDACTED]. He requested that the patient be taken care of by the Staff on-call ophthalmologist and he will follow-up the patient after discharge.

ASSESSMENT:

- 1). ACUTE BILATERAL HYPHEMA.
- 2). ACUTE TEAR OF THE RIGHT IRIS OF THE EYE.

DISPOSITION: Plan - The patient will be admitted to the 3-Bauer to [REDACTED]. The patient will have her eyes patched bilaterally. The head of the bed will be placed at 30-degrees.

cc:

Emergency Department Patient Record

Dictated:

Transcribed:

PMD:

Document ID:

_____, M.D.

CONSULTATION REPORT

DATE OF ADMISSION:

DATE OF CONSULT:

CONSULTING PHYSICIAN:

REFERRING PHYSICIAN:

HISTORY:

I was kindly asked by ... to help with the care of this 57 year old black female who was involved in a motor vehicle accident on (...) The patient was rendered blind when she was struck in the face by an expanding air bag. The patient has remained blind since her accident. I was asked by ... to evaluate this patient for a sleep disorder. The patient states that she has had intermittent problems off and on with difficulty maintaining her sleep. Typically she is able to fall asleep within a few minutes but then finds herself waking up frequently at night. She does not experience any hypnic jerks, snoring, restless leg or limb movement activity and does not appreciate any other sleep disturbance that accounts for her awakening. She will typically wake up feeling fatigued and has some difficulty getting through the day. She does not experience napping or sleeping during the day. The patient relates that this problem has clearly been stress related in the past, usually accompanying problems in her family life and in her business. The patient has been treated for depression which accompanied her menopause. She has been on estrogen and progesterone replacement along with antidepressant therapy which included Prozac, Paxol and Zoloft. Because of insomnia, she also was given Ativan which seemed to leave her drugged the following day. She has not complained of night sweats or hot flashes as part of her sleep disturbance. Her most recent bout of insomnia has occurred over the last two months. She will occasionally have trouble falling asleep but most of the time she is asleep within 10-15 minutes, on a bad night it will take up to half an hour or more. She wakes up 3-4 x night and on occasion will get up and read. She cannot recall specifically waking through problems though she does recall the current projects at work and in her family life that are on her mind. She goes to bed around 11 o'clock and wakes up around 5 in the morning. On the weekends she has a similar bedtime but wakes up an hour or two later. She feels that she has to cram a full day into every hour to get anything done. At night upon retiring she does not experience thoughts racing through her mind to prevent her from sleeping. Currently the patient feels that her depression has

CONTINUED:

PATIENT#:

ACCOUNT#:

PT. NAME:

ATTND MD:

CONSULTATION REPORT

PAGE TWO

been under fair control despite the trauma of the last few days. The patient has used Prozac, Paxol and Zoloft as mentioned in addition to Ativan. Other than these medications she has been on no sleeping medications. She does not smoke cigarettes and drinks alcohol 3-4 x week. She consumes two cups of coffee in the morning and 3-4 x week will have an afternoon tea. She does not drink any caffeinated products in the late afternoon or evening and she does not street drugs. Her prescribed medications include

PAST MEDICAL HISTORY: Unremarkable. She has an allergy to iodine.

SOCIAL HISTORY: She is married, has children, her husband is in business.

REVIEW OF SYSTEMS: She has no symptomatology to suggest esophageal reflux, no heartburn or indigestion. She experiences some coughing and postnasal drip which sometimes will awaken her at night.

PHYSICAL EXAMINATION: She is a pleasant middle-aged black female in no distress. Pupils are notable for bilateral hyphema. The left pupil is fixed, and nonreactive. The right pupil shows an irregular contour. The iris appears to be separated laterally from the sclera. There are multiple petechiae over her face along with some abrasions in the maxillofacial area. Oropharynx shows good dentition. The soft palate is somewhat redundant. No tonsillar hypertrophy noted. Neck supple, the thyroid is not enlarged, there is no lymphadenopathy. Breast exam deferred. Chest showed clear breath sounds bilaterally. Cardiac exam, there is a I-II/VI systolic murmur at the left lower sternal border. Abdomen is soft and nontender with active bowel sounds, no hepatosplenomegaly or masses. Neurologic, the patient is alert and oriented. Neuro function is normal. She does not appear depressed.

ASSESSMENT: is a 57 year old black with a long standing intermittent difficulty with maintaining sleep (insomnia) who is now feeling with a super-imposed acute problem arising from her catastrophic motor vehicle accident that has left her blind.

CONTINUED:

PATIENT#:
ACCOUNT#:
PT. NAME:
ATTND MD:

CONSULTATION REPORT

PAGE THREE

This is accompanied by a change in her daily routine and activity along with a foreign environment. The pain is associated with her injury and the psychological impact of her acute visual loss. Her sleep distress may also be complicated by current drug effects which include Prednisone, codeine and benzodiazepines. Her long-standing insomnia seems to be related to times of considerable stress in her life and work. She has been treated for depression with serratonin rector inhibitor antidepressants but has found them to be activating and cause insomnia in of themselves. Interestingly her chronic problem does not seem to be one of initiating sleep but rather in maintaining sleep. This is a feature that is commonly found with patients who have depression.

RECOMMENDATIONS:

I would suggest breaking down her complaints into acute and chronic phases. She currently feels her chronic depression is under control, especially in light of her recent trauma. I would try to maintain some simlance of a normal sleep/wake cycle, sleep hygiene with proper timing of her normal sleep/wake cycle, avoidance of daytime napping and early morning light exposure will all be beneficial. I would like her to consider using a short acting benzodiazepine at bedtime such as Restoril with a repeat dose in 30 minutes if she is not asleep. This is only to reinforce sleep in a setting of this acute disruptive set of circumstances. She may continue this for a few days at home but then should be weaned off that. For the treatment of her more chronic phase would consider an antidepressant such as Trazadone or Desyrel which has a sepsis effect and gives a more sleep profile that more closely resembles a normal sleep architecture. It is an antidepressant and might help smooth out some of her chronic insomnia, especially if it is related to depression. Thyroid panel would be useful to make sure that she is not hyperthyroid as this can lead to insomnia so as not to mix multiple benzodiazepines with different half lives. I think I would like to eliminate the Valium and Halcion that she is currently getting.

I would like to thank
the care of this patient.

for asking me to participate in

PATIENT#:

ACCOUNT#:

PT. NAME:

ATTND MD:

CONSULTATION REPORT

PROGRESS RECORD
(SIGN EACH NOTE)

NAME

ADDRESS

RESIDENTIAL PARTY Note progress of case, complications, consultations, change in diagnosis

EMPLOYER

INSURANCE

OCCUPATION

MEDICAL

SS MEDICARE

BUS

S. M. W. D.

REF. BY

LETTER
TELE

DIST-NEAR

AGE

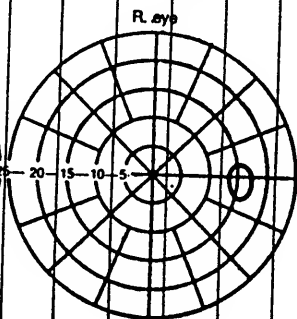
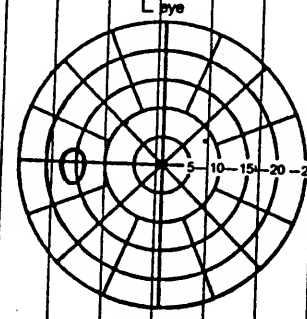
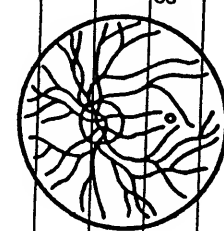
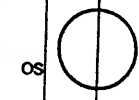
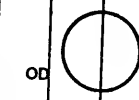
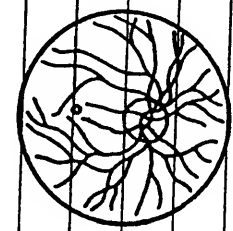
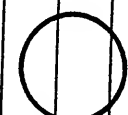
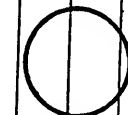
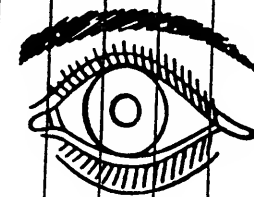
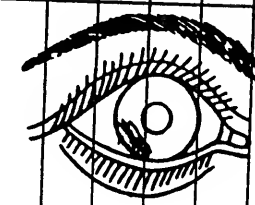
ADD

PRESENT Rx:

OD
OS

+

X X



DIAGNOSIS:

TREATMENT:

FEF

VA = NM 3"
RF 2'

- Cxv Estrogen, Progestin
Thyroid
- Anti-Opressants

SL-OD Cornea & Irida 3+ +
Mucous epithel 1-2 +
Iridodiolysis From [redacted] OD
Traumatic iridoplegia
Small Hyphema 10% - 2+ F&C
? Early Cataract Forming - Lens
look 5/ opaque

OS - Cornea Edema 3+
Mucous 2+. AC & Small
H. < 5% 3+ F&C

Traumatic iridoplegia
When started = by little star OS
OS = Entalabain
An < 10
No Fibrus Reflex

Contrast Field & Light
= Full

Problem to me is NOT H which is < 10% OD
but inflammatory process
Traumatic iridoplegia & other looks like
Early cataract formation OD OS

DATE

Comfortable

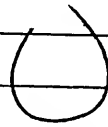
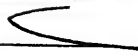
Ext. Lens Slightly

Cover Lens Expected

but Still Very

AC F H

Pupils Dilated

Len OD still E ? Check
or not a lensPush - keeps only as
she up

Elevated for food

Note progress of case, complications, consultations, change in diagnosis, etc.

Sheep

F

DATE

Patient

Physician

Therapist

" "

June

VA = AM 6"

CF 3'

Even Equally both sides

? fine cloud OD still

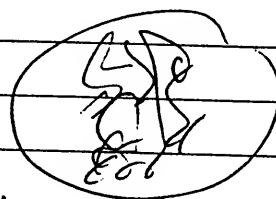
AC FNO H

Pupils Dilated - Equal OD

No Reflex OD = 22 w/ H

20 Cat

OS C



Lat reflex
but fine vision
all over

Upper < 12
14

Discovered Problems - Progress - expected
future

Suggest @ Intensive Psychotherapy (He has
an therapist) - ADMP

Assured & Progress - urban - ? over OS
- risk future case "8x"

Estimate 70-80% due to severity of fault

VA - but may not be good even for 16

Plan in design - Home Care - etc

Note progress of case, complications, consultations, change in diagnosis, etc.

PROGRESS RECORD
(SIGN EACH NOTE)

DATE

She has problems sleeping thru night
 worried she will be awake & her partner
 - I'll have [redacted] when sleep &
 & her I adjust meds pharmacology
 to try & avoid addiction
 Problem being alone self - decreased
 use of car - reflects that she
 in eyes - Center line
 will let out of bed but
 Pub office too

Mon - will come in office
 - VA line

(X-ray)

Office Exam = Relent Eden
 Sig input

Have 2" Corner, lens, cat
 1 kit skin
 will I need in few days

Note progress of case, complications, consultations, change in diagnosis, etc.

PROGRESS RECORD
 (SIGN EACH NOTE)

DATE

Sleep Disorders Consult

Full note dictated

57 y/o BQ & long standing intermittent difficulty & maintaining sleep (insomnia) now superimposed on acute problem arising from change in daily routine/activities, pain, and ~~change~~ psychological impact of her acute medical loss.

Current sleep distress may also be complicated by drug effects (Pudacore, and Codeine) & Benzodiazepines.

Her long standing insomnia seems to be related to times of considerable stress in her life & work. She ~~has~~ has been treated for depression with serotonin reuptake inhibitors antidepressants but has found them to produce worsening of her sleep habits & T.D. & of course at no. Interestingly she does not usually have difficulty falling asleep; and prioritizes her problems as difficulty maintaining her sleep.

Recommendations

① Would suggest breaking down her complaints into acute & chronic phases (She feels her chronic depression off of medication has been relatively well controlled until this recent trauma)

Note progress of case, complications, consultations, change in diagnosis, etc.

DATE

- ② Would try to maintain some semblance of normal sleep/wake cycles (same time up & sleeping) Avoid daytime napping
 2 get some early AM light exposure
 try facing open window, Revers Sleep hygiene
- ③ Would use short acting benzodiazepine at bedtime (Restoril) repeat dose in 30" if not asleep.
 This is only for acute disruptive hospital environment and possibly at home for a few days
- ④ For treatment of more chronic phase would consider Trazodone (Desyrel) Its sedative effect and gives sleep profile that most closely parallels normal sleep architecture. It is an antidepressant.
- ⑤ Thyroid panel - ↑ Thyroid hormone will produce disruption in sleep.

⑥

Thank you

Note progress of case, complications, consultations, change in diagnosis, etc.

S

PROGRESS RECORD
 (SIGN EACH NOTE)

DATE

Sleep EVO

Had long visit to son who
had just arrived from Singapore
last eve. Took Restinol @ 11:00 pm
& promptly went to sleep.
Awakened at 11:40 am.

Still a little tired. No residual
effect of Restinol this am.
Plan

① Up during the day to light
exposure (has some light appreciation)

② No Napping

③ Regulated Bedtime / Awake time

④ Restinol @ 11:00 pm.

⑤ Thyroid panel

Eye - Minus inject

VA = MA

= CF 6' TC

In a b/w

Plan Discharge

Note progress of case, complications, consultations, change in diagnosis, etc.

PROGRESS RECORD

(SIGN EACH NOTE)

DATE

vll

Sleep FU

Took Restoril @ 1100 &

Promptly fell asleep

Awakened at 0300 &

understood & HA. attributed

loss to Restoril. Has

used Halcion before &

a problem & would like

to switch. Both fast acting

Benzodiazepines. Both could

cause HA's but with a

long term management

of insomnia might need to

address degree of loss

of light entrainment on

Suprachiasmatic nucleus which

is responsible for timing of

circadian rhythms. If

she remains blind melatonin

may be of use. For

Depression induced

insomnia Desyrel might

be a good choice. Would

like to wait until acute

crisis passes.


Note progress of case, complications, consultations, change in diagnosis, etc.

PROGRESS RECORD

(SIGN EACH NOTE)

DATE

- See office note
- will file



Note progress of case, complications, consultations, change in diagnosis, etc.

PROGRESS RECORD
(SIGN EACH NOTE)

DAILY LABORATORY REPORTS
INPATIENT DISCHARGE - MEDICAL

Printed:

Page:1

***** THYROID TESTING *****

DATE:

TIME:

T-4, Total	10.2
T-Uptake	31
FT4I	3.2
T3, Total	90
TSH	0.57

UNITS NORMALS

mcg/dL 4.5-10.9

% 22-37

1.6-3.8

ng/dL 80-181

mIU/mL 0.35-5.50

H = High Abnormal

L = Low Abnormal

C = Critical Result

Director of Laboratories
Discharge Date:Sex: F DOB:
AttnAcct.
Case

(END OF REPORT)

Ind. Ophth.
Scleral Depr.
Slit Lamp Bio.
Gonioscopy

✓

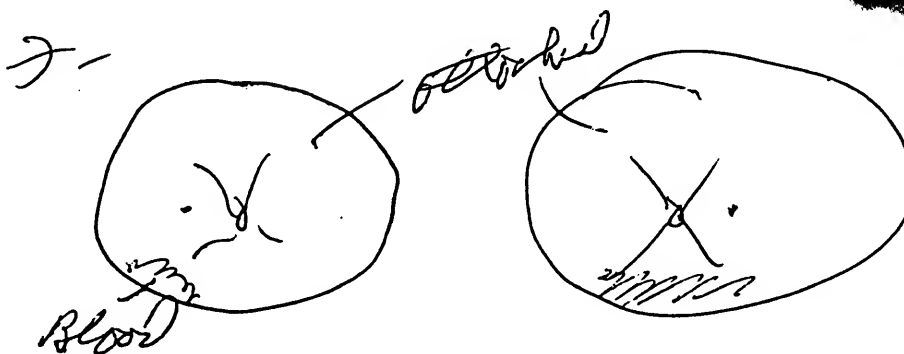
TAT 10 H.K.

V/A 20/200
20/200

Discussed
risks
benefits
complications
prognosis
alternatives to procedure

Ri. IT Polyma (un) 03; 201-
05-200-70

100
100



1 mo
Follow

JS

CASE RECORD CONTINUATION

NAME _____ NEW ADDRESS _____

DATE _____ PROGRESS _____ FEE _____

US - Vnt home OS, no RD
OSSp = Inebdologan d1
glouern OS
Vnt home OCE
PVD d1

see front

10 days -
Aldu

Temperat US B11

Vnt home 25mg P11

94

2

36

RE:

DATE OF CONSULT:

Thank you for referring your patient for retinal consultation.

CHIEF COMPLAINT: Poor vision in both eyes.

OCULAR HISTORY: The patient was involved in an auto accident on , in which a car was rear-ended and the air bag system of her car was activated. She was wearing contact lenses at the time and when she was examined by you these lenses were broken in both eyes and there appeared to be non-full thickness lacerations of the cornea in both eyes accompanied by hyphema. There has been a difficult posterior view of the eye since that time although you have seen some areas of edema. She is sent for evaluation of her retinal findings. Her previous history was only of myopia with astigmatism with no past history of glaucoma or previous trauma.

MEDICAL HISTORY: A complete medical history is on file. Medical history is significant for past hysterectomy. No diabetes or high blood pressure.

ALLERGIES: Iodine dye for x-ray evaluation.

FAMILY HISTORY: Non-contributory.

VISUAL ACUITY: 20/200 with pinhole right eye, 20/400 with pinhole left eye.

VISUAL FIELD: Contracted peripherally with the left eye having more contraction than the right.

RE: _____

2

inferior temporally in the right eye. Vitreous is seen through the dialysis to the peripheral area of the cornea with some pigment dispersion on it. The lens appears in normal position without spontaneous movement. It has a mild nuclear sclerotic appearance. The left conjunctiva is the same. The cornea has a steamy, slightly hazy look as does the anterior chamber. A significant flare is present in the eye with 1+ pigment and cells. Again, a few mild KP are seen. No dialysis is seen of the iris in the left eye. The lens again has an early nuclear sclerotic appearance.

APPLANATION PRESSURE: 15 right eye, 48 left eye.

RETINA: Indirect ophthalmoscopy with scleral depression of the right eye reveals that the retina is attached with no visible peripheral retinal tear or dialysis. The optic nerve appears to have about a 0.3 cup and is pink and the macular region appears undamaged. No [REDACTED] edema is evident today but there is a posterior vitreous detachment and some circulating blood that may have just drifted posteriorly from the anterior iris damage. In the left eye I have a bare view through the hazy media and the retina appears attached. No detailed view is evident.

IMPRESSION:

1. TRAUMATIC IRIDODIALYSIS, RIGHT EYE.
2. VITREOUS HEMORRHAGE, RIGHT EYE.
3. POSTERIOR VITREOUS DETACHMENT, RIGHT EYE.
4. SECONDARY GLAUCOMA, LEFT EYE, TRAUMATIC.

COMMENT: I performed an ultrasound examination because there was not an adequate view of the left eye and this study revealed scattered intraretinal hemorrhage and/or vitreous opacification with no retinal detachment. The posterior pole region appears unremarkable ultrasonically.

I placed the patient on Timoptic 1/2 percent twice a day in the left eye only and had her start Neptazane 25 mg. b.i.d. and told her you may wish to increase that medication if the pressure is not low enough and she has tolerated it well. I made arrangements to see her again in 10 days unless there is a decrease in function of either eye and otherwise I am hopeful that over time she will clear the media in both eyes and that there is no retinal complication. It is interesting that she does have the history of cataract formation when you saw her immediately after the blunt trauma and that this in fact has improved with either time or the steroid management. I will see her again in 10 days.

Thank you very much for letting me evaluate your patient.

Sincerely,

RESIDENCE ADDRESS	CITY	ZIP CODE	TELEPHONE
-------------------	------	----------	-----------

OCCUPATION	EMPLOYED AT OR BUSINESS	ADDRESS	TELEPHONE
------------	-------------------------	---------	-----------

NAME OF	FATHER	HUSBAND	EMPLOYED AT OR BUSINESS	ADDRESS	TELEPHONE
---------	--------	---------	-------------------------	---------	-----------

GROUP INSURANCE COVERAGE

RENDER BILL TO

ADDRESS

DATE _____

PROGRESS

FEE

Ind. Ophth.

Social Depr.

Slit Lamp Bio.

Gon'oscopy

Discussed

INSKS

benefits

complications

prognosis

alternatives to procedure

VF-

五

Indochina

F-see LHP

PROGRESS

normally used contact	per sec FEE
--------------------------	----------------

already
dilated

CF $3\frac{1}{2}$ ft $\times \frac{20}{200}$ cft

$$Hm + \frac{20}{400} \text{ cons } \rightarrow \text{ goes } \frac{1}{\text{pit}}$$

Cluster grid - On unable to accomplish

ST + P. Fol MG unable to accomplish,
already delayed

Was on Prod until yesterday

smoky view

TA. 15/48

RE:

Your patient returns with a history of slightly improved vision since her last examination following the traumatic auto accident with air bag activation resulting in bilateral ocular hemorrhages, iridodialysis of the right eye and elevated pressure of the left eye. Her pressure has responded well to your treatment.

VISUAL ACUITY: 20/200 both eyes.

SLIT LAMP EXAMINATION: There is a prominent inferior temporal dialysis of the right eye but the vitreous does not appear to be filling the anterior chamber in any greater degree than was previously seen. The lens has some opacification. The left eye is quiet with, again, some minimal opacification of the lens that appears nuclear sclerotic.

APPLANATION PRESSURE: 8/18

RETINA: I have a clear view today of the retina and with indirect ophthalmoscopy there is no retinal detachment and no apparent choroidal rupture in the posterior pole. She has persistent vitreous hemorrhage which has settled primarily inferiorly in both eyes and examination of the far retinal periphery is still limited with scleral depression in those regions.

COMMENT: I think she is doing well considering the damage that occurred and will see her again for retinal evaluation in one month at which time I can hopefully see additional detail. Thus far it appears that time alone will allow for clearing of the hemorrhage in both eyes and a hopeful return to good visual function. I will contact you again after the next examination.

Sincerely,



PHYSICIAN ACCESS FACE SHEET - PATIENT DEMOGRAPHICS

NAME :
AC SS #1 :
ADDRESS #2 :
CITY :
STATE/ZIP :
FIN CLASS :

ADM DATE/TIME :
UNIT # :
ACCOUNT # :
PHONE (H) :
PHONE (W) :

BIRTHDATE : 01/37 57Y
SS #

SEX : F FEMALE
MARITAL STAT : M MARRIED
ACCIDENT : AUTO ACCIDENT

ADMIT DX : ACUTE BILATERAL HYPHEMA
WORKING DX : ACUTE BILATERAL HYPHEMA
ADMIT MD :
ATTEND MD :
REFER MD :

FAMILY MD :
CONSULT MD #1 :
CONSULT MD #2 :
CONSULT MD #3 :

GUARANTOR :
ADDRESS #1 :
ADDRESS #2 :
CITY :
STATE/ZIP :
PHONE (W) :
REL TO PT : SELF

RELATIVE :
REL ADDRESS 1 :
REL ADDRESS 2 :
REL CITY :
REL STATE/ZIP :
REL PHONE (H) :
REL PHONE (W) :
REL TO PT : SPOUSE

EMPLOYER :
ADDRESS #1 :
ADDRESS #2 :

CITY :
STATE/ZIP :

INSURANCE 1

COMPANY :
GROUP # :
POL/SS # :
INSURED :
REL TO INS : *SPOUSE
MAIL TO :
ADDRESS #1 :
ADDRESS #2 :
CITY :
STATE/ZIP :
PHONE :
COMMENT : CARD COPIED

EXT :

INSURANCE 2

EXT :

INSURANCE 3

COMPANY :
GROUP # :
POL/SS # :
INSURED :
REL TO INS :
MAIL TO :
ADDRESS #1 :
ADDRESS #2 :
CITY :
STATE/ZIP :
PHONE :
COMMENT :

EXT :

INSURANCE 4

EXT :

Thanks for choosing us for eye care needs. The answers to the following questions give us important information that will assist us greatly in our care for you, so please take the time to read the questions carefully, and give complete and truthful answers. Use the back of the page if necessary.

Name: _____ MALE ☐ FEMALE ☒

The doctor can address me as: _____

I am here today because: Auto Accident

I would like the doctor to: Examine

If there's a problem, it is: Eye + vision

and it started (when?): _____

and my symptoms are: Blindness

I was directed here by: Emergency Room Doctor

I'll check mark any major illnesses:

Diabetes <input type="checkbox"/>	Heart disease <input type="checkbox"/>	Arthritis <input type="checkbox"/>	High blood pressure <input type="checkbox"/>
Alcoholism <input type="checkbox"/>	Anemia <input type="checkbox"/>	Cancer <input type="checkbox"/>	Tuberculosis <input type="checkbox"/>
Asthma <input type="checkbox"/>	Epilepsy <input type="checkbox"/>	Ulcer <input type="checkbox"/>	Hypertension <input type="checkbox"/>
Hearing loss <input type="checkbox"/>	HIV positive <input type="checkbox"/>	Mental illness <input type="checkbox"/>	Migraines <input type="checkbox"/>
Colitis <input type="checkbox"/>	Goiter <input type="checkbox"/>	Stroke <input type="checkbox"/>	Liver disease <input type="checkbox"/>
Drug abuse <input type="checkbox"/>	Impotence <input type="checkbox"/>	Kidney disease <input type="checkbox"/>	Big changes in weight <input type="checkbox"/>

I'll check mark any past problem's I've had with my eyes:

Infections <input type="checkbox"/>	Injuries <input type="checkbox"/>	Surgeries <input type="checkbox"/>	None <input checked="" type="checkbox"/>
Cataracts <input type="checkbox"/>	Glaucoma <input type="checkbox"/>	Crossed eyes <input type="checkbox"/>	Other <input type="checkbox"/>

I've been to another ophthalmologist: NO ☐ YES ☒ His name is: _____

I've worn glasses IN THE PAST ☐ PRESENTLY ☒ NEVER ☐
How Long? 45 YRS

I've worn contact lenses: IN THE PAST ☐ PRESENTLY ☒ NEVER ☐
How Long? 32 YRS What kind? H 2nd

I'll check mark any family history of eye disease:

Cataracts <input type="checkbox"/>	Glaucoma <input type="checkbox"/>	Crossed eyes <input type="checkbox"/>	None <input checked="" type="checkbox"/>
Lazy eye <input type="checkbox"/>	Blindness <input type="checkbox"/>	Retinal Detachment <input type="checkbox"/>	Other <input type="checkbox"/>

I have allergies: NONE ☐ SOME ☒

To medications: NO ☐ YES ☒

THE NAME OF THE MEDICATION: Radio Iodine

Allergy other than to medication (to what?): _____

My medications: PyrimethamineMy eye medications: Atropine, prednisoneMy occupation: Real estate

My employer: _____

My hobbies: Bicycling, walking, Exercising, ReadingI have more than four alcoholic beverages a week: Yes ☐ No ☐I currently smoke: Yes ☐ No ☐I smoked for one year or more: Yes ☐ No ☐

I have had the following surgeries (please include approximate dates): _____

HysterectomyI'll check mark any symptoms that I have:
(Presently)

	Yes	No
Decreased vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blind spots in vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poor night vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poor color vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poor depth perception	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Abnormal sensitivity to light	<input type="checkbox"/>	<input type="checkbox"/>
Halos around lights	<input type="checkbox"/>	<input type="checkbox"/>
Problems with glare	<input type="checkbox"/>	<input type="checkbox"/>
Red eye	<input type="checkbox"/>	<input type="checkbox"/>
Itching eye	<input type="checkbox"/>	<input type="checkbox"/>
Eye which bulges out	<input type="checkbox"/>	<input type="checkbox"/>
Puffy eye	<input type="checkbox"/>	<input type="checkbox"/>
Eye discomfort	<input type="checkbox"/>	<input type="checkbox"/>
Eye dryness	<input type="checkbox"/>	<input type="checkbox"/>
Pressure in or behind eye	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mattering of eyes	<input type="checkbox"/>	<input type="checkbox"/>
Tearing of eyes	<input type="checkbox"/>	<input type="checkbox"/>
Pus from eyes	<input type="checkbox"/>	<input type="checkbox"/>
Crusting or red eyelids	<input type="checkbox"/>	<input type="checkbox"/>
Change in blinking	<input type="checkbox"/>	<input type="checkbox"/>
Double vision	<input type="checkbox"/>	<input type="checkbox"/>
Poor blood supply to the back of your eyes	<input type="checkbox"/>	<input type="checkbox"/>
Allergies to medicines including eye drops	<input type="checkbox"/>	<input type="checkbox"/>
Occupational effect on eyes	<input type="checkbox"/>	<input type="checkbox"/>

These symptoms have effected me:
(In the past)

	Yes	No
Blurred vision spells	<input type="checkbox"/>	<input type="checkbox"/>
Decreased vision spells	<input type="checkbox"/>	<input type="checkbox"/>
Fluctuating vision	<input type="checkbox"/>	<input type="checkbox"/>
Floaters in my vision	<input type="checkbox"/>	<input type="checkbox"/>
Flashing lights	<input type="checkbox"/>	<input type="checkbox"/>
Jagged lines in vision	<input type="checkbox"/>	<input type="checkbox"/>
Eye surgery	<input type="checkbox"/>	<input type="checkbox"/>
Eye injury	<input type="checkbox"/>	<input type="checkbox"/>
Serious eye infection	<input type="checkbox"/>	<input type="checkbox"/>
Spasm of eye lids	<input type="checkbox"/>	<input type="checkbox"/>
Retraction of eye lids	<input type="checkbox"/>	<input type="checkbox"/>
Lazy eye lids	<input type="checkbox"/>	<input type="checkbox"/>
Abnormal pupil	<input type="checkbox"/>	<input type="checkbox"/>
Corneal disease	<input type="checkbox"/>	<input type="checkbox"/>
Glaucoma	<input type="checkbox"/>	<input type="checkbox"/>
Cataract	<input type="checkbox"/>	<input type="checkbox"/>
Retinal disorder	<input type="checkbox"/>	<input type="checkbox"/>
Eye tumor	<input type="checkbox"/>	<input type="checkbox"/>
In or out turning of eye	<input type="checkbox"/>	<input type="checkbox"/>
Did your occupation adversely effect your eyes?	<input type="checkbox"/>	<input type="checkbox"/>

(For those who wear glasses or contact lenses)

I am satisfied with my glasses/contact lens prescription: Yes ☐ No ☐

(For those who don't wear glasses or contact lenses)

I am satisfied with my uncorrected vision: Yes ☐ NO ☐

My primary insurance company is: _____

My Age: 57Date of birth: 1/37

PLEASE CIRCLE ONE: I'M

MARRIED SINGLE SEPARATED DIVORCED WIDOWED

PLEASE CIRCLE THE DAY PHONE NUMBER
INCLUDE AREA CODE

Home telephone: _____

Work phone: _____

MY PROFESSIONAL CHARGES TODAY WILL BE PAID FOR IN FULL BY:

Please circle one

CASH CHECK MY INSURANCE CREDIT CARD

My Social Security #: _____

Drivers License #: _____

Home address: _____

Number, Street, and Apt.

City: _____

Zip: _____

My Employer: _____

Address: _____

Please answer the following questions if the patient isn't the insurance subscriber

Subscriber's Name: _____

Date of Birth: _____

Subscriber's Social Security #: _____

Subscriber's Employer: _____

If you haven't done so, please give your insurance card to the receptionist. It will be copied and returned quickly to you.
Please don't leave the office without it.

We bill only your primary insurance for any and all services. You are solely responsible for billing your secondary.

Please read the following carefully and sign at the bottom

-----IN ORDER TO PROCESS INSURANCE CLAIMS OR FOR ANY OTHER NECESSITY, I HEREBY AUTHORIZE THE EYE TREATMENT CENTER OF GREATER LONG BEACH TO FURNISH THE INFORMATION ACQUIRED IN THE COURSE OF MY EXAMINATION AND TREATMENT AS NEED BE. I ALSO AUTHORIZE THE PAYMENT OF MEDICAL BENEFITS TO THEM FOR THE SERVICES RENDERED.

-----I UNDERSTAND THAT I AM RESPONSIBLE FOR MY ESTIMATED PORTION OF THE CHARGES WHEN THE SERVICES ARE RENDERED, AND THE TOTAL AMOUNT DUE IF MY INSURANCE COMPANY DOES NOT PAY WITHIN A REASONABLE TIME PERIOD.

-----IF I AM BEING EXAMINED FOR GLASSES, I UNDERSTAND THAT I MUST MAKE FULL PAYMENT AT THE TIME OF SERVICE DUE TO THE FACT THAT MOST INSURANCE, INCLUDING MEDICARE, DOES NOT PAY FOR "ROUTINE EXAMS"

-----I WILL BE REIMBURSED FOR ANY OVERPAYMENT. OVERDUE ACCOUNTS ACCUMULATE MONTHLY INTEREST OF 11/2 %

SIGNATURE: _____

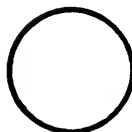
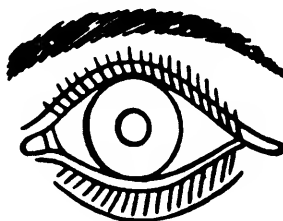
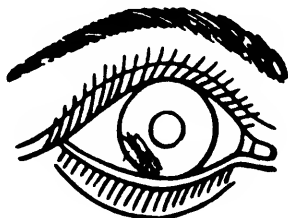
DATE: _____

3 mi. West of
 1-27
 OD

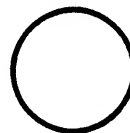
PRESENT Rx: AGE: DIST-NEAR
 OD -9.25 + 1.50 x 60 ADD
 OS -10.50 + 1.75 x 130

1-27

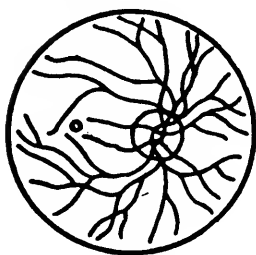
OD



OD



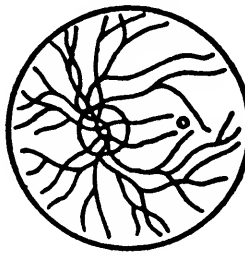
OS



OD

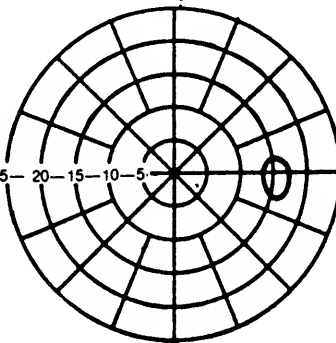
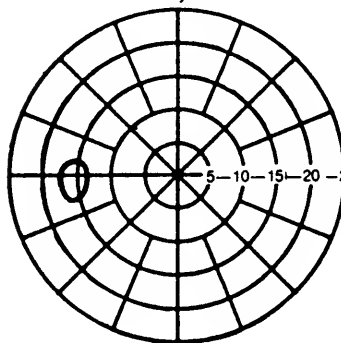


OS



L. eye

R. eye



- 2+ FRC
 m; - Lens
 opaque

c Small

EC

OD



27 Field to light
 = Full

with is < 10% OD
 very process
 what looks like
 OD ON 705

DIAGNOSIS:

FEE:

TREATMENT:

Explained to Patient - Husband (AN)
 - Scap to in office
 - Pred 80-40-20 (maybe will be 197. Risk)
 - a tryptic bid - bed rest - 051

REF BY

MEDICAL

OCCUPATION

SS MEDICARE

DOB:

TELE:

BUS.

S.

LETTER TELE:

94

1/24

VA = HM 3"
RF 2'

- ON ESTROGEN, PROGESTIN
Thyroid
- Anti-Depressants

PRESENT Rx:

OD -9.25 + 1.50 x 60
OS -10.50 + 1.75 x 13

SL-OD Cornea = Edema 3+ +

maculated epithel 1-2+

iridodialysis From 9-6 OD

Traumatic iridoplegia

Small Hypophema 10% - 2+ F&C

? Early Cataract Forming - Lens
~~OK~~ looks sl opaque

OS - Corneal Edema 3+

Maculated 2+. AC = Small

H. < 5% 3+ F&C

Traumatic iridoplegia

When Flashed = 4y little star OD

OS = Cent alvein

An < 10

No Fudus Reflex

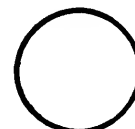
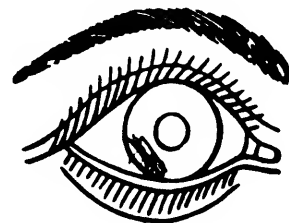
confirm? Field = Light
= Full

Problem to me is NOT H which is < 10% OD

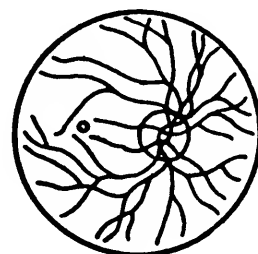
< 5% OS but inflammatory process

Traumatic iridoplegia (what looks like)

Early cataract formation OD ON 70s
(and poss Ret. Vit Pub)



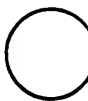
OD



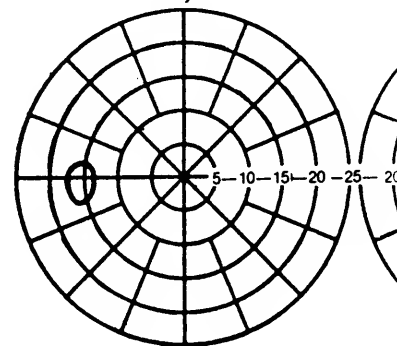
OD



OS



L eye



DIAGNOSIS:

TREATMENT:

Explained to P.
- Scop & iridectomy
- Pred 80-40-20 (M)
- atropine b.i.d -
-



Am < 17
18

B- Will P need to 40 mg
x 3d reduce

..... Discharged - McBooth - Frt
HA gental - GE upset - 12/300
VA Same - $-10.75 + 1.25 \times 145$
Sully Ben

Even much Cleaner - about Clean
OD - Clean OS - iridodily as per
OD 2-3+ F L 2+ cells ↓
OS 1-2+ F 1-2+ cells ↓

CF 4-6"
CF 3'

(5 pet penicillin
DVT called)

Aug 8
10

OD 3+ Stute

1-2+ Eden of Core

2-3+ FCC

Trindolaty - Royal Pallet

1+ White las (? less than last sl)

OS - Core 1+ Stute

almost clear

2-3+ FCC

NS - Hare - 17

Vit H + F

Ende - Over - OD upper only

OS - Vit H Halted + hatched

prefer all areas.

Have nice L Mac but

looks OK

Induct -

of small area seen

the ~~Index~~



Indirect: OD - Hye only

OS



(Hye)

? H on retina

8 - [REDACTED]
 there
 atyp
 pred | pred 10
 5
 2

needs
 gonioscopy

Mon - [REDACTED] - Timoptic + DX

OD = No R.D.

OS = Ultrason = No R.D.

VA CF 6'
 HM 6" Am 8
 34 DX 4/4/94

8 - Cor OS = 1 + Edema

Cor OD Clear

OD = vit cony thk iridodiolysis
 1-2 + F&C

OS Edema 2+. Y + F&C Mostly
 Rbc's - Pigment white but def blood tinged

A - Naptayri 30 gnd
(on Br 250)

Blurred VACOS
x 3d
HA x 3d

Tim $\frac{1}{2}$ bid 05 - no atyp a Pref F
on atyp bid - PR gnd

Td

— Rest chair

SC - Cuent ben eden

2-3 + FLC (Still Alc)

An $\frac{6}{24}$

A - Naptay 30 gnd (on Br 250)
Tim $\frac{1}{2}$ bid

(3/3)

SC - Coal Eden abt Sue as Yalf

2-3 + FLC (Sue)

An $\frac{4}{12}$

A - Br 250 Tid

Tim $\frac{1}{2}$ bid

/ atyp 1%
Pred Fbid 200

(3/3)

#3

NA CF 6'
CF 6'

Has Dichtman

This is child

SL - much less react to Dx
↓ to 2+FLC

An $\leq \frac{4}{12}$ (No Dx this AM)

PO - Stop Dx - atyp bid

Prod Fgid

Tam $\frac{1}{2}$ bid
Tid

mult + y/p? answered

(313)

..... 1 day re-ck Atropine BID

Vx
SC 20/CF 10'
CF 10'

Prod F / O.U.

Tam $\frac{1}{2}$ BID as

SL - Co-OL

AC OD 1+FLC

OS 2+FLC

An $\leq \frac{9}{16}$

OD: indolence = head of V-ct
thigh delay

PO - atyp bid
PF gid

T $\frac{1}{4}$ bid \perp (one in AM)

Don't see

(313)

1 ... * (4)

SC - enll

AC OD 1 + FCC
OS 2 + FCC

An < 6
16

R - PF qid
atropine bid

- 5d

no Timoptic

(313)

6 day re-ck: PF QID
Atropine BID > 0.4.

VA 20/200
CC 200

SC - enll

OC 1-2 + FCC on

An = 12
26

iridectomy? If yes

R - PF qid
atropine bid

- Exercise, etc. decreased

Timoptic bid
2d

(317)

10 HA on (R)

An < 26
23

1 (2 + FCC) on

let on bhr

R - PF qid
atropine bid

Timoptic (P) bid on

4-5d

(313)

VA CC 20/200
200-

Time
past 10:00

SI - Cur Clean - Flew for 100

1+FLC (L)

usually a bit
Ac 910.

Am - 20
20

Fish - Medial Hx 1-2+

Can see blips of other vessels on

scan locally - Myopia cups - 0.5

Step - Glacow 20 team

Stand

As - atyp bid

Tim 1/2 bid + Profile bid

PF bid -

Td

(will try no stand if looks

not too much work
to do still)

Am - 23
23

SI - Cur Ch. 1-2+FLC (SLT)

As - atyp bid

PF to go 2-3 then stop

is this stand reduced or byflowing

if stand

need to be paid

if before

need to be paid

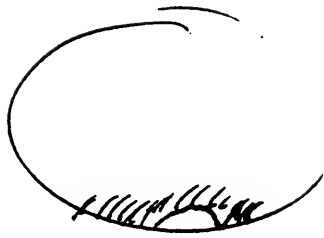
As - OD - Vc Prod	} OS Prod F bid (5)
atyp	
Tim	
Pro } bid	
Sleep Prod → Ringer	atyp
	Tim
	Pro
	outside Penta

↓ VA OD Study
 moving up from bottom -
 SC - C Ch on. AC 1+ FPC
 ind del on as bfr
 Am < 1/8

As - Mc Beath Tdy	} bid OS
2 ¹⁵	

Ret readjusted OD - Cyp OS
 Tn ↓ OD for stopped Tim - OS 21
 on
 VA Ec 20/200 Tim 1/2 bid as
 200 cymydil qid on
 Inf frite qid on
 SC - C Ch
 AC 1-2 Fhe - occas Acetylen - (bryol)
 1+ cell
 Firdididid OD as bfr
 Am < 12
 30

2 MU
 POST
 10/09



91 TV
91 TV - 10
P-21

angle recession - 100' at 60' ch

- ① - 100' bid or
 - ② FAL Fato Qid OD - Nae 0.5
 - ③ Tim $\frac{1}{2}$ bid or
 - ④ 2 d
-

Case Reports

Severe Ocular Trauma From a Driver's-Side Air Bag

Motor vehicle accidents are a common cause of ocular trauma in the United States. Most ocular injuries occur in patients not wearing a lap-shoulder seat belt.^{1,2} The air bag was recently introduced as a method to reduce the consequences of frontal and front angle collisions, which account for more than 50% of motor vehicle accidents involving serious injuries and fatalities.³ Air bags have been estimated to reduce the incidence of brain injury in motor vehicle accidents by as much as 25%.³ Inflation of an air bag may also reduce the frequency and severity of ocular trauma. We describe herein a patient who sustained significant ocular trauma from an inflated air bag during a motor vehicle accident.

Report of a Case.—A 26-year-old man driving 35 miles per hour and restrained by a three-point lap-shoulder belt crashed head-on into a tree. The driver's-side air bag inflated during the collision. The patient sustained facial abrasions on the left side and complained of decreased visual acuity and a floater in the visual field of his left eye. Best corrected visual acuity was 20/15 OD and 20/50 OS. Examination results of the right eye were normal. Slit-lamp examination of the left eye revealed ecchymosis and edema of both upper and lower lids, resulting in mechanical ptosis. Moderate conjunctival hyperemia was

present with an inferotemporal subconjunctival hemorrhage. A microscopic hyphema was also present and a partial Vossius ring was found on the anterior lens capsule. Intraocular pressure was 14 mm Hg OD and 16 mm Hg OS. Dilated fundoscopic examination of the left eye revealed vitreous and subretinal hemorrhages and retinal folds (Figure). Ultrasonography revealed a dense opacification in the posterior temporal globe and blood in Cloquet's canal. The results of coagulation studies and hemoglobin electrophoresis were normal. The patient was followed up for 6 months. The vitreous and subretinal hemorrhages resolved, and visual acuity improved to 20/20 OS.

Comment.—To the best of our knowledge, this is the first reported case of severe ocular trauma from a motor vehicle accident in a patient protected by a driver's-side air bag. There is no way of knowing whether the air bag was protective in this case of ocular injury or if it forced the patient's head laterally against the driver's side window; however, several studies have shown a reduction in morbidity and mortality from driver's-side air bags.^{3,4} Our case demonstrates that severe ocular injury can occur during a low-speed frontal automobile crash in the presence of a fastened three-point lap-shoulder belt and deployed air bag.

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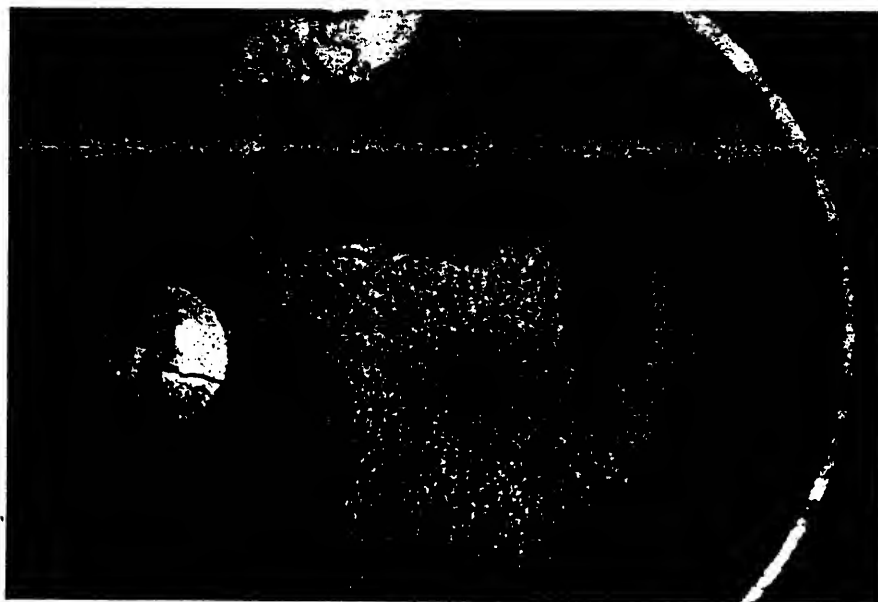
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Radial Keratoneuritis in *Pseudomonas* Keratitis

Radial keratoneuritis, the apparent presence of infiltrate along corneal nerves in suppurative keratitis, has been described¹ as an early sign of *Acanthamoeba* keratitis and is commonly thought to be pathognomonic for this infection. We describe herein a patient with *Pseudomonas aeruginosa* ulcerative keratitis in which radial keratoneuritis was a presenting sign.

Report of a Case.—A 22-year-old woman who wore extended-wear soft contact lenses first experienced discomfort in her left eye 5 to 7 days before presentation. At that time, she discontinued contact lens wear. Two days before presentation, she noted increasing redness, pain, and photophobia in the left eye. Her ophthalmologist noted radial keratoneuritis, and she was referred to the [redacted] for consideration of propamidine isoeithinate (Brolene) therapy. On evaluation, she reported 5 years of extended-wear soft contact lens use and had used the current pair for 1 year. Wearing time was 1 week, with weekly cleaning and disinfection. She denied using home-mixed saline, and claimed no history of swimming, hot tub use, or ocular trauma with organic material. On initial evaluation at the Eye Center, she was found to have a peripheral corneal ulcer of 2.75×2.25 mm with underlying stromal infiltration, and a linear mid-stromal infiltrate extending 2 mm from the peripheral edge of the ulcer to the limbus (Figure). This infiltrate appeared to extend along a radial corneal nerve and was believed to represent an area of radial keratoneuritis. Initial Gram's stains of corneal scrapings taken from the area of ulceration revealed polymorphonuclear leukocytes and gram-negative rods. Scrapings of the ulcer bed and surrounding tissue revealed no amoebae when stained with periodic acid-Schiff, calcofluor white, and lectinase. The patient was administered hourly drops of

Preretinal hemorrhage, subretinal hemorrhage, and retinal folds in the left eye following trauma.



In Reply.—The [redacted] Program reports that registrations for ophthalmology residency positions reached a high of 1652 in [redacted] 1985. Subsequently, there has been a steady decline in the number of registrations (1416 in 1986, 1365 in 1988, 1262 in 1989, and 1152 in 1990). Some leveling of this trend occurred in 1990 and 1991 (1152 registrations in 1990 and 1171 in 1991). The figures for 1992 (obtained after the date of the interview) show 1236 registrations.

Obviously, these figures are still significantly lower than those from the mid-1980s. Discussing these trends in the [redacted] MD, stated: "Our statistics for the past eight ophthalmology matches show that a decline in the number of registrants since the mid-80's seems to have stopped with some signs of a reversal." The good news is that the match rate for US seniors has risen from 55% in 1985 to 80% in 1992. Therefore, while [redacted] is correct in stating that "the number of applications for ophthalmology resident positions was higher than in any year since 1989," this recent change does not yet overturn the downward trend of the last 8 years.

Furthermore, I would like to point out that, in the cited article, I attributed this downward trend not only to RBRVS, but also to the "negativism that's been cast about" regarding ophthalmology both inside and outside our profession over the last decade. The decline both in the number of applications for residencies and in reimbursement levels for ophthalmologic services under the RBRVS stems, at least in part, from this negativism.

The small increase in registrations over the past 2 years is encouraging, but I believe it is too soon to draw conclusions from these figures. When viewed in broader context, I believe that the optimism suggested by [redacted]'s letter should be more carefully guarded.

[redacted] MD
[redacted] WVa

Protective Eyewear Needed With Driver's-Side Air Bag?

To the Editor.—Severe ocular trauma from driver's-side air bag in conjunction with a three-point lap-shoulder seat belt¹ and air-bag keratitis² have been recently documented. I examined a 45-year-old woman restrained by a three-point lap-shoulder seat belt whose air bag was deployed when she drove her 1990 Lexus LS 400 at 30 mph head-on into a tree. She suffered right upper and lower lid ecchymoses and edema, right inferonasal subconjunctival hemorrhage, right corneal abrasion, and 20° to 30° of variable right exotropia.



Traumatic right upper and lower lid ecchymoses and edema, right exotropia, and right subconjunctival hemorrhage related to driver's-side air-bag deployment with three-point lap-shoulder restraint. Note right upper eyelid and eyebrow excoriation probably caused by car air bag.

Orbital roentgenograms showed no abnormalities. All her injuries resolved completely without residua.

The case report by [redacted] involved facial abrasions and severe ocular trauma on the left side, and one of their hypotheses was that the air-bag may have forced that patient's head laterally against the driver's-side window in that head-on accident. With this description of a right-sided injury, the air-bag is directly implicated as the cause of the injury. Another hypothesis for these injuries besides direct air-bag-injury is that the air bag may force the driver's hand against the eye and orbit. Protective eyewear may possibly be required to protect against possible air-bag-related ocular and periocular morbidity. Further investigation is needed when an air bag is used in conjunction with three-point lap-shoulder restraints.

Since this letter was accepted for publication, a 34-year-old man wearing a three-point lap-shoulder seat belt was seen after the driver's-side air bag was activated when his 1992 Lexus ES 300 hit a pothole at 30 mph. He sustained an abrasion on the tip of the nose, left upper and lower lid abrasion, edema and ecchymoses, left inferotemporal subconjunctival hemorrhage, and left inferotemporal corneal abrasion. He recovered completely without residua.

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of static and kinetic perimetry indicate that static testing has better reproducibility than kinetic perimetry. Peripheral manual kinetic perimetry in the [redacted] consistently had poorer quality control scores than automated static perimetry.² In addition, automated perimetry is not subject to bias on the part of the perimetrist.

If [redacted] reads our article [redacted]

[redacted] we believe that he will be reassured. The method used for classification of the visual fields of the [redacted] was clearly specified and underwent reliability testing. It is not unusual that a carefully controlled clinical trial yields results that disagree with earlier uncontrolled clinical observations. Indeed, we also reported that visual field abnormalities were found in 68% of fellow eyes at baseline, a result that has not been reported by previous investigators. The advantages of using standardized protocols, clearly defined inclusion and exclusion criteria, a specific time schedule for follow-up examination of patients with acute optic neuritis, and a large sample size have been well demonstrated by clinical trials.

The large number of altitudinal and other nerve-fiber bundle defects that we observed for localized visual field loss in the [redacted] was an important factor in forming our conclusions. [redacted] seems to have missed this point. We are not the first to conclude that the pattern of visual field loss in optic neuritis is of limited diagnostic value. [redacted] also concluded that the differentiation between optic neuritis and anterior ischemic optic neuropathy was difficult because of considerable overlap in the patterns of visual field defects found for both disorders.

We certainly believe that visual field testing is an integral part of the management of patients with optic neuropathy. However, we stand by our contention that the patterns of visual field loss are of limited value in differentiating optic neuritis from other causes of optic neuropathy. Clinical features such as historical information, age of the patient, presence of pain, and the time course of visual field loss are far more useful in differentiating optic neuritis from other causes of optic neuropathy.

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Visual field profile of optic neuritis: the experience of the Optic Neuritis Treatment Trial. *Ann Neurol*. 1993;111:231-234.

Study Group. Quality control functions of the visual field reading center for the optic neuritis treatment trial (ONTT). *Ann Neurol*. 1993;14:143-159.

1991;109:1668-1672.

Retinal Detachment Caused by Air Bag Injury

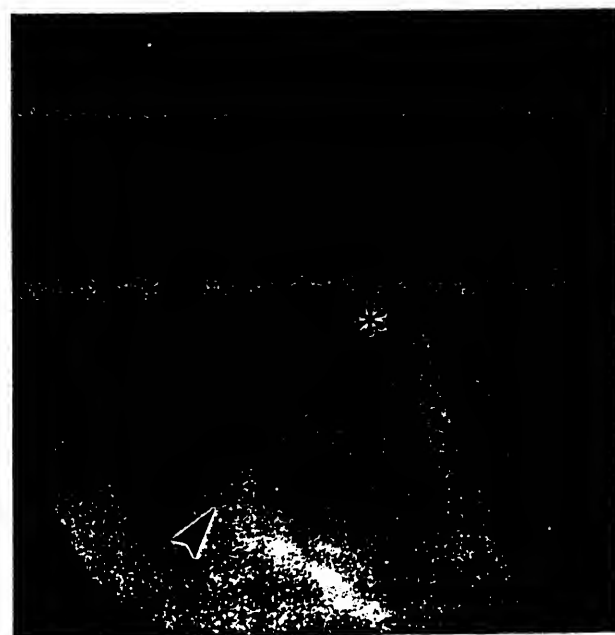
A 40-year-old man drove his automobile into a roadside ditch to avoid an oncoming car. He struck a tree stump at a speed of 10 to 15 miles per hour, causing inflation of the driver's-side air bag, which struck his face and upper body. He did not strike any other components of the car's interior. He was wearing a three-point lap-shoulder belt and was not wearing glasses.

Immediately after the accident, the patient noted visual loss in the right eye. A vitreous hemorrhage was noted by his ophthalmologist. One month later he was noted to have developed a retinal detachment in the right eye. His visual acuity was hand motions in the right eye and 20/15 OS. Examination results of the left eye were normal. In the right eye, intraocular pressure was 41 mm Hg and inferior angle recession was

See also pages 1318, 1320 and 1333

present. There were 2+ cells and 3+ flare in the anterior chamber and 3+ cells in the vitreous. Fundus examination demonstrated a total retinal detachment with early proliferative vitreoretinopathy and a full-thickness macular hole. An inferotemporal retinal dialysis extended from the 6-o'clock position to the 9:15 position (**Figure**). A large circumferential tear parallel and posterior to the dialysis extended clockwise from the 7-o'clock position to the 9:15 position.

Vitrectomy, scleral buckling, retinal membrane stripping, fluid-gas exchange, and endophotocoagulation were



Air bag injury with inferotemporal retinal dialysis (arrowhead), large circumferential retinal tear (asterisk), and total retinal detachment in the right eye. Visual acuity was hand motions.

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performed in the right eye. Four months later, visual acuity was 20/300 and the retina was attached.*

Although various manifestations of ocular contusion have been observed in association with air bag inflation,^{1,2} no previous cases of air bag-related injury resulting in retinal detachment and macular hole have been published, to my knowledge. Notably, the circumstances of this particular case suggest that the air bag was the sole cause of the patient's ocular injury.

Air bags are designed to inflate in response to sudden longitudinal decelerations of approximately 11 to 12 miles per hour. Collisions at low absolute speeds with sufficient deceleration may cause air bag inflation. During inflation, the air bag is propelled out of its storage compartment at speeds typically of more than 100 miles per hour (oral communication, National Highway Traffic Safety Administration, 1992). The air bag striking the occupant's face at this high velocity may be responsible for blunt ocular injury.

Improvements in air bag design may help to reduce the morbidity associated with air bag inflation, while preserving its lifesaving attributes. To facilitate these efforts, new cases of air bag-related injuries should be reported to the National Highway Traffic Safety Administration:

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Air Bag-Associated Ocular Injury

We read the Case Report by [REDACTED] in the 1993 issue of the [REDACTED] with great interest. These authors described a patient with periorbital fractures, retinal tears, and lens subluxation from air bag insufflation and found three cases in the literature of similar damage. They must not have been aware that we reported two cases of ocular injury from air bags in the 1991 issue of the [REDACTED].

In the first case, there was corneal edema and anterior uveitis that responded to steroid treatment as well as retinal edema that resolved spontaneously with return of visual acuity. In the second case, there was a choroidal rupture. Our letter was written in response to a report by Ingraham et al³ of alkali eye injury from air bag discharge. Interestingly, one of our patients felt sure that he had been in a collision that would not have threatened his well-being otherwise.

Since this report, a patient has been referred to us who required lensectomy, vitrectomy, membranectomy, and keratotomy after the air bag in his car saved his life when he ran into a telephone pole. This case was referred to us by his lawyer, who is accumulating all the evidence he can

find implicating air bags in eye trauma. At the time of the patient's accident, car manufacturers were not posting special instructions recommending concomitant seat belt use

See also pages 1317, 1320, and 1333

in cars equipped with air bags. The driver was a short man whose face may have been closer to the enlarging air bag because of his height and the lack of seat belt restraint.

In our letter to the [REDACTED] we suggested all physicians with knowledge of air bag-involved trauma contact the National Traffic Safety Administration [REDACTED]. As [REDACTED] et al¹ point out, refinements in air bag design may be warranted in light of increasing evidence of periocular trauma. We think it would be more beneficial to society if improvements in air bags were made with the cooperation of the National Traffic Safety Administration, the reporting physicians, and the automobile makers rather than as a result of pressure by the legal community whose lawsuits in this field will no doubt raise the price of cars and air bags for years to come and possibly discourage the use of future innovation for fear of liability litigation.

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In reply

We thank [REDACTED] and colleagues for informing us of their two cases of air bag-related ocular injuries. Their suggestion for closer cooperation between physicians with knowledge of air bag-related trauma, governmental regulatory offices, and automobile makers is a valid one. We believe that the conscientious reporting of these potentially vision-threatening injuries would not only heighten awareness among our colleagues, but also encourage cooperative efforts to provide constructive criticism of current air bag designs. This criticism, however, is not meant to minimize the tremendous strides made in reducing morbidity and mortality due to motor vehicle accidents through the use of air bags.¹

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performed in the right eye. Four months later, visual acuity was 20/300 and the retina was attached.

Although various manifestations of ocular contusion have been observed in association with air bag inflation,^{1,2} no previous cases of air bag-related injury resulting in retinal detachment and macular hole have been published, to my knowledge. Notably, the circumstances of this particular case suggest that the air bag was the sole cause of the patient's ocular injury.

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Since this report, a patient has been referred to us who required lensectomy, vitrectomy, membranectomy, and keratectomy after the air bag in his car saved his life when he ran into a telephone pole. This case was referred to us by his lawyer, who is accumulating all the evidence he can

find implicating air bags in eye trauma. At the time of the patient's accident, car manufacturers were not posting special instructions recommending concomitant seat belt use

See also pages 1317, 1320, and 1333

in cars equipped with air bags. The driver was a short man whose face may have been closer to the enlarging air bag because of his height and the lack of seat belt restraint.

In our letter to the [redacted] we suggested all physicians with knowledge of air bag-involved trauma contact the National Traffic Safety Administration. [redacted] It may also point out improvements in air bag design may be warranted in light of increasing evidence of pericardial trauma. We think it would be more beneficial to society if improvements in air bags were made with the cooperation of the National Traffic Safety Administration, the reporting physicians, and the automobile makers rather than as a result of pressure by the legal community whose lawsuits in this field will no doubt raise the price of cars and air bags for years to come and possibly discourage the use of future innovation for fear of liability litigation.

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CASE REPORTS

Air Bag Injury Producing Retinal Dialysis and Detachment

An increasing variety of air bag-associated ocular injuries have been reported, ranging from chemical keratitis to retinal tears and orbital fractures.¹⁻⁴ We recently treated a patient who experienced a traumatic iritis, vitreous hemorrhage, and retinal dialysis with retinal detachment following a blow to the eye from an air bag.

Report of a Case. A 31-year-old woman with a previously unremarkable ocular history was the driver in a motor vehicle that was involved in a frontal collision. She was wearing a passive three-point restraint and was aware of the impending collision. She remembered the explosive inflation of the air bag and did not recall striking her head on any portion of the vehicle. Immediately following the collision, she noted decreased visual acuity in her left eye and mild erythema of the left side of her face.

Ophthalmologic examination 2 days later revealed mild photophobia and a visual acuity of 20/20 OD and 20/200 OS. Her visual field was intact to finger counting in all quadrants. There were no facial or orbital ecchymoses or abrasions. The conjunctiva was mildly hyperemic over the circumlimbal area. A moderate number of pigmented cells were present in the anterior chamber and a fibrin clot was present in the pupillary space. An inferior posterior synchia was present, which lysed on dilation. Only a blurred view could be obtained of the retina, which appeared to be flat. Treatment with topical steroids and cycloplegics was be-

gun, and 3 days later the patient had less photophobia and the fibrin clot in the anterior chamber had cleared. A vitreous hemorrhage was present.

Three weeks later, the patient's visual acuity was 20/25 OD and hand motions in the inferotemporal quadrant of her left eye. The slit-lamp examination results were normal except for trace cells in the anterior chamber and numerous pigment cells in the retrolental space. The intraocular

*See also pages 1317,
1318, and 1333*

pressure, as estimated with Goldmann applanation tonometry, was 17 mm Hg OD and 15 mm Hg OS. A moderate vitreous hemorrhage was still present and a 3½ clock hour retinal dialysis was present in the inferotemporal quadrant of the left eye, with a retinal detachment involving all but the superonasal quadrant.

A trans pars plana vitrectomy, gas-fluid exchange, and retinal cryopexy were performed. One month following surgery, the retina was attached and the visual acuity in the operated eye was 20/40 at distance and J1 at near.

Comment. Air bags have been reported to cause commotio retina¹; choroidal rupture¹; intraretinal,² subretinal,³ and vitreous hemorrhages^{3,4}; and retinal tears.⁴ To our knowledge, this is the first report of a retinal dialysis with ensuing retinal detachment from an air bag injury. When eye trauma has occurred in a motor vehicle accident involving air bags, retinal evaluation should be performed and care taken to exclude a retinal dialysis or retinal tears. If the posterior

segment cannot be visualized, repeated examinations may help detect a delayed retinal detachment.

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Corneal Edema, Hyphema, and Angle Recession After Air Bag Inflation

Several recent reports have documented severe ocular trauma after air-bag inflation during motor vehicle accidents.^{1,2} et al² reported a case in which a patient sustained periorbital fractures, retinal tears, and lens subluxation during a single vehicle accident in which the driver's-side air bag inflated. We describe herein a patient who developed localized corneal edema, hyphema, and angle recession following trauma after air bag inflation during a motor vehicle accident.

Report of a Case. A 51-year-old man, wearing a three-point lap-shoulder seat belt and driving a late-model Mazda RX7 was involved in a two-car frontal collision in which both vehicles' driver's-side air bags inflated. The approximate speed of the vehicles was 15 to 20 mph. The other driver, who was also restrained with a three-point lap-shoulder seat belt, was unhurt. The make and model of

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her vehicle were not known. Our patient sustained abrasions to the right side of his face as well as to his nose. He complained of decreased visual acuity in the right eye, and the emergency department physician was unable to detect a red reflex. The best corrected Snellen visual acuity was 20/400 OD and 20/20 OS.

Slit-lamp examination in the emergency department revealed right upper lid ecchymosis and edema. A temporal subconjunctival hemorrhage was present. The anterior chamber showed a 10% hyphema with diffuse microhyphema. A central horizontal linear

patient was not receiving any topical medication.

Comment. To our knowledge, this is the first reported case of angle recession after a motor vehicle acci-

dent in which the patient was protected with a driver's-side air bag. [redacted] reported a case in which marked stromal edema with Descemet's folds occurred after concussion injury from an air bag. [redacted]

See also pages 1317, 1318, and 1333

corneal abrasion was also present. Intraocular pressures were 14 mm Hg OD and 17 mm Hg OS. Funduscopy examination of the right eye revealed a normal-appearing macula and optic nerve. The retina was flat in all four quadrants without evidence of commotio retinae.

One day after the accident, the best corrected visual acuity remained at 20/400 OD. A slit-lamp examination showed a well-healed corneal abrasion with a localized area of corneal edema (**Figure 1**). The hyphema had decreased and layered out nasally. The patient reported sleeping on his left side the night before. Two weeks later, the best corrected visual acuity had improved to 20/80 OD. The intraocular pressure was 6 mm Hg but the microhyphema persisted. Gonioscopic evaluation revealed 180° of angle recession from the 2-o'clock to 8-o'clock positions, and treatment with topical steroids and cycloplegics was continued (**Figure 2**).

On his last visit 2 months after the accident, the patient's best corrected visual acuity was 20/15 OD. The intraocular pressure measured 12 mm Hg. The anterior chamber was quiet but the pupil was peaked slightly toward the 7-o'clock position where an area of peripheral anterior synechiae had formed. By this time, the

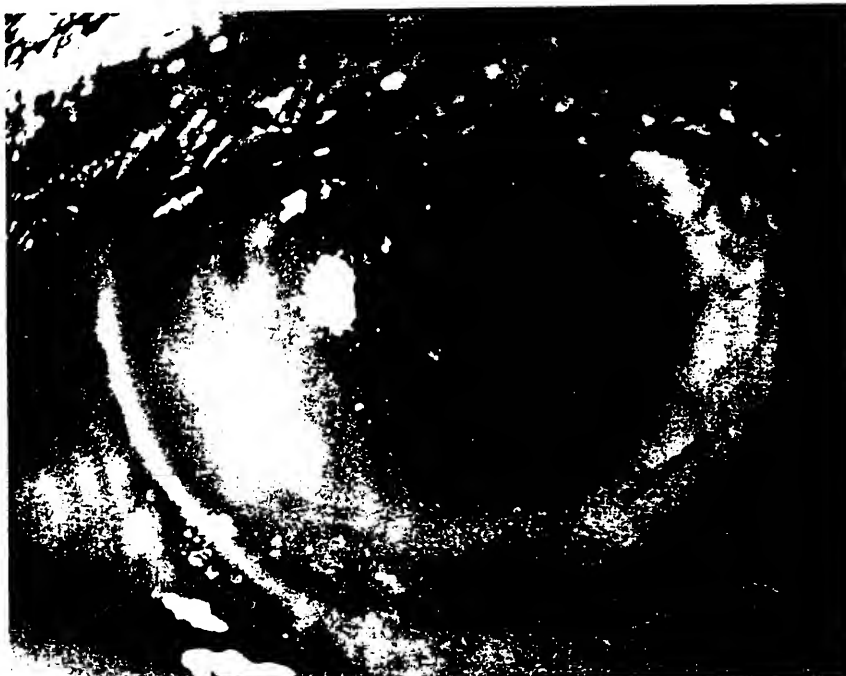


Figure 1. Oblique view of the right eye 1 day after the injury. Note the localized posterior corneal folds. The hyphema has layered out nasally.



Figure 2. Angle photograph of the right eye 2 weeks after the injury. Note the angle recession inferiorly with resolving hyphema.

reported a case in which microhyphema, subretinal hemorrhage, and retinal folds occurred in a low-speed frontal collision. The reduction in morbidity and mortality from motor vehicle accidents in which air bags are involved is not disputed. However, further research into air bag design should be directed toward minimizing the risk of ocular and periorbital injuries.

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Orbital Cellulitis After Retrobulbar Injection of Chlorpromazine

The retrobulbar injection of chlorpromazine hydrochloride is used by

some physicians in Europe and the United States for the relief of pain in persons with irreversible blindness. In 1980, Fiore and associates¹ reported that retrobulbar chlorpromazine (25 mg) was more effective in relieving pain than retrobulbar alcohol and causes fewer complications. A recent prospective, noncontrolled study confirmed these findings, demonstrating the successful relief of pain in more than 80% of 50 patients given a single retrobulbar injection of 25 mg of chlorpromazine.² Transient hypotension occurred in a few patients but resolved within 6 hours.² We describe herein a man who developed a sterile orbital cellulitis following retrobulbar injection of chlorpromazine associated with histologic evidence of fat necrosis.

Report of a Case. A 68-year-old man was scheduled for enucleation of a blind, painful eye due to a traumatic injury sustained during World War II. The patient was offered a retrobulbar injection of 25 mg of chlorpromazine to help relieve his eye pain since surgery could not be performed for several weeks. The injection was per-

formed without difficulty. The next day, the patient complained of increased eyelid swelling and persistent pain. On examination, there was marked chemosis of the right conjunctiva, 2 mm of right proptosis, and erythema and edema of both eyelids. The patient was treated with an oral analgesic. The eye became pain free within 4 days as the chemosis and lid swelling resolved. Surgical enucleation was performed 18 days after the retrobulbar injection.

On histologic examination, the retrobulbar connective tissue showed granulomatous inflammation and fat necrosis with scattered foamy histiocytes surrounding fat vacuoles (**Figure**). Fibrous obliteration of posterior Tenon's space had already begun. There was no evidence of an ocular penetrating wound from the retrobulbar injection.

Comment. A variety of injuries lead to the destruction of the plasma-lemma of fat cells resulting in the histopathologic picture of fat necrosis. We have observed this same type of tissue reaction following retrobulbar injection of absolute alcohol but are not aware of any data indicating how often it occurs. The mechanism of chlorpromazine-induced fat necrosis is unclear. Like other surface-active compounds, chlorpromazine will cause cell lysis in high concentrations.³ A transient, sterile orbital cellulitis should be recognized as one of the potential complications of retrobulbar chlorpromazine injection.

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The retrobulbar connective tissue of the right orbit contains chronic inflammatory cells, including foamy histiocytes. Fat cells normally present in this area have been partially replaced by collagenous fibrous tissue (hematoxylin-eosin, original magnification $\times 180$).

EDITORIAL

Air Bag: Friend or Foe?

AS MORE and more cars are equipped with air bags, the number of reports of air bag-related eye injuries is also growing.¹⁻⁸ When a new product, originally introduced to enhance safety, is itself identified as the possible source of trauma, it is time to reevaluate the product's usefulness.

Our search of the international literature found eight publications reporting on air bag-related eye injuries. Others appear in this issue of the *Journal of Trauma*. An analysis of the details of the ocular trauma, the outcome, and the circumstances of the motor vehicle crash (MVC), as found in these previously published reports, is as follows.

See also pages 1317, 1318 and 1320

The title of the first report¹ left no doubt as to the cause of the injury: "Severe Ocular Trauma From a Driver's Side Air Bag." However, if one reads the "Comment" section of this case report, serious doubts arise. The authors admit that "there is no way of knowing whether the air bag was protective in this case of ocular injury or if it forced the patient's head laterally against the driver's side window . . ."; the patient's visual acuity improved from 20/50 to 20/20 without treatment. In the second report, "mild bilateral keratitis" was seen in a 2-year-old child (thrown from the rear seat to beneath the dashboard).² Visual acuity 1 month after the injury was 20/40 OD and 20/30 OS. The third report described one patient with corneal abrasions.³ Two weeks after the accident, visual acuity was 20/25. In the fourth report, the author attributed a 20% hyphema to the air bag.⁴ Visual acuity improved to 20/30 by the 16th postinjury day.

In the fifth case, lid ecchymoses and edema, subconjunctival hemorrhage, corneal abrasion, and 20° to 30° of variable right exotropia occurred following a head-on crash.⁵ All injuries resolved completely. The sixth case report described a case of mild alkaline keratitis in one eye of the driver.⁶ One week after the injury, visual acuity reached 20/25. The seventh report listed three cases of corneal abrasions.⁷ Details of the injuries were not pub-

lished. The eighth report described the most severe injury and the only one with significant and permanent visual damage.⁸ The patient suffered periorbital fractures, hyphema, lens displacement, vitreous hemorrhage, and retinal tears in one eye. Visual acuity 8 months following the injury was 20/70.

A few important questions remain unanswered. Were all of these injuries actually caused by the air bag or were some merely *coincidental*? What would have happened to those injured had the car not been equipped with an air bag? Would they have escaped without injury? Or would they have escaped at all? Is it preferable to sustain corneal abrasions from an air bag or to hit the car's hard interior surfaces?

The air bag probably is responsible for certain eye injuries. All cases of proven chemical keratitis can reasonably be attributed to the material used (about 70 g of sodium azide is ignited, inflating the 60-L air bag in 10 milliseconds⁶); the talc powder may also inflict abrasions. Minor blunt trauma may occur when the

An analysis of our data revealed that MVC [motor vehicle crash]-related eye injuries are indeed sight threatening

eye (moving forward) and the air bag (moving the opposite direction) contact each other. Eye injuries can also result if the inflating bag forces the individual's head sideways. However, such scenarios have to be firmly proven before the fabric air bag is blamed for inflicting bone fractures.

There is overwhelming evidence that air bags save lives and reduce morbidity.⁷ The speed of the vehicles at the time of the crash was 30 to 45 mph in all five cases in the reports in which data were provided, and one cannot avoid the following question: would not the injuries have been more severe if the cars had not been equipped with air bags? An analysis of our data revealed that MVC-related eye injuries are indeed sight threatening. Of 150 eyes sustaining MVC-related serious injuries in the United States Eye Injury Registry database, whose information

acted largely before the widespread use of air bags. had to be enucleated. Forty-one percent of eyes with adequate follow-up remained legally blind.¹⁴

Are we suggesting that the reports on air bag-related eye injuries were false? Absolutely not. Are we suggesting that when a product has been proven time and again to prevent injuries, trauma caused by it should not be reported? Absolutely not; the reports may be very useful in enhancing product design.

However, clinical reports should be worded carefully. It is dramatic to report injuries caused by safety devices, but virtually any object can cause eye injuries under certain conditions. Before the air bag is targeted as the source of injury in the title of clinical communications, we should be reasonably certain that this is based on facts, not presumptions, and these facts should be listed in the body of the publication.

There are at least two but possibly three or even more collisions during an MVC. The first collision is between the car and another object; the car abruptly slows down or is instantly brought to a halt. The second collision is between the occupant, who is traveling at the speed the car had been traveling, and the car's interior. Additional impact may result from rebounding. Imagine a collision at 50 mph with the car's speed immediately falling to zero but the driver still moving forward at 50 mph; even if the seat belt is worn, the air bag provides an important cushion to absorb the body's kinetic energy.

The air bag prevents injury and death in MVCs; its benefits far outweigh its risks. While it is our responsibility to continue reporting injuries that in fact have been caused by air bags, it is also our responsibility to report them so that those in the medical, legal,

technical, and general community do not derive false impressions.

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Correspondence

Potential Toxicity of Mitomycin C

To the Editor.—[redacted] recently reported on the use of mitomycin C as adjunct chemotherapy during glaucoma filtration surgery. Both investigations followed similar protocols in which the episclera was soaked with a solution of 0.2 to 0.4 mg/mL of mitomycin C for 5 minutes before creating a sclerostomy. The authors concluded that a single, intraoperative application of mitomycin C favorably affected the outcome of trabeculectomy surgery. Although their studies have no concurrent control groups, two randomized controlled trials comparing fluorouracil with topical mitomycin are underway (A [redacted] 1991). No intraocular toxicity was reported using this protocol. Although retinal toxicity has been demonstrated after intravitreal injection of mitomycin C in the rabbit model,¹ no studies have addressed intraocular toxicity following injection into the anterior chamber. We studied the intraocular toxicity of mitomycin C following intracameral injection because of the demonstrated potency of this medication, and the anticipated use of mitomycin C in glaucoma surgery.

See also pp 1693 and 1725.

Materials and Methods.—Our study design was approved by The [redacted] (Md) Committee on the Use and Care of Animals. Four [redacted] white rabbits were anesthetized with intramuscular injections of ketamine hydrochloride (35 to 45 mg/kg) and xylazine hydrochloride (5 to 10 mg/kg). Intracameral injections of 50 μ L of mitomycin C (0.5 mg/mL of balanced salt solution) were made through a corneal paracentesis in four eyes, and an identical volume of balanced salt solution was similarly injected into the anterior chamber of the contralateral eye to serve as a control. All four eyes injected with mitomycin C demonstrated a severe inflammatory response within 24 hours. Within 72 hours, the four corneas exposed to mitomycin C were opaque and markedly thickened. Although one edematous cornea spontaneously cleared within 10 days after injection, the remaining three eyes showed progressive, irreversible bullous keratopathy. Histopathologic study performed 2 weeks after injection revealed corneal edema with complete absence of normal corneal endothelium, engorgement of iris blood vessels with necrosis of the iris and ciliary body, and acute inflammatory cells in the anterior chamber. The retina appeared normal on clinical and histologic examinations. No toxicity was seen in the control eyes.

Comment.—Mitomycin C demonstrates severe toxicity when one drop of the recommended topical dose is placed directly in the anterior chamber. Such severe effects might occur if mitomycin C was applied after creating the sclerostomy, or if it was injected subconjunctivally during the postoperative period. Those surgeons who use mitomycin C recommend irrigation of the episclera after its application. This appears wise if the toxicity indicated in experimental rabbits is likely to occur in humans.

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HypHEMA Caused by Air Bag

To the Editor.—[redacted] recently reported the first case of severe ocular trauma occurring in a patient who was "protected by a driver's-side air bag." I describe herein a patient who, rather than being protected by the air bag, suffered an ocular injury directly attributable to the air bag.

Report of a Case.—A 34-year-old woman driving between 40 and 65 km/h skidded into another car on wet pavement. She was wearing a three-point lap-shoulder seat belt when the air bag inflated. The car sustained damage to the front end, but the passenger compartment and windows were intact. The patient presented to the emergency department with abrasions and contusions primarily centered in the middle of her face. Her unaided visual acuity was 20/200 OD and hand movement in the left eye. Abrasions were present on both eyelids, slightly greater on the left than on the right. She had corneal epithelial abrasions over the superior half of both corneas, associated with stromal thickening and striae of Descemet's membrane. The right eye had 1+ anterior chamber cellular reaction; the left eye had a 20% hyphema and an irregular unreactive pupil. She was hospitalized, treated with bed rest and binocular patching, and bled again before being discharged. A small retinal hemorrhage was thereupon noted, but no retinal tears were found. A small angle recession was also noted on gonioscopy. Sixteen days after the injury, her pinhole vision was 20/30 +2 OU. Intraocular pressures were never elevated, and her vision improvement coincided with resolution of the hyphema in the left eye and of the corneal abrasions and corneal edema.

Comment.—In the case described by [redacted], there was a question of whether the eye injury was due directly to the air bag or to the air bag forcing the patient's head against the driver's side window. The case I have described, with the bilateral eye injuries and central symmetrical facial abrasions, implicates the air bag as the cause of the ocular injuries. In addition, given the state of the undamaged passenger compartment, speculation may arise as to whether this patient may have avoided serious ocular damage had the air bag not inflated. Given its recent introduction to the mass market, there is no doubt that more ocular injuries attributed to air bags will be noted. Perhaps further refinements of the air bags will allow them to keep their well-established attributes while eliminating their potential for causing ocular injuries.

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The Lens Opacities Case-Control Study

To the Editor.—We read with interest the article by [redacted] et al¹ in the [redacted] issue of the [redacted]. The authors identified ingestion of gout medications as a risk factor for the

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Corneal Endothelial Cell Loss Induced by Air Bags

Background: Although the automobile air bag is a safety device used to protect drivers from death and moderate-to-severe injury, recently it also has been reported to be associated with some ophthalmic injuries. The authors have encountered a case in which a normal air bag may have caused a driver's corneal endothelial cell loss. In this study, the authors evaluate corneal endothelial cell loss caused by several types of air bags in the hope that air bag technology may be improved.

Methods: The authors performed impact tests with whole pig eyes fixed in a crash test dummy, using five different types of air bags. The area of damaged corneal endothelial cell was analyzed quantitatively.

Results: The authors found that corneal endothelial cell loss was correlated with the inflator power of the air bag but not with its weight.

Conclusion: Although greater inflator power is needed for rapid air bag expansion, the effect on the eye should be considered in further refining this device. There may be greater latitude in the selection of air bag material. The authors believe their technique is applicable to the assessment of many air bag or passenger variables.

1993;100:1819-1823

Although the automobile air bag is a safety device used to protect drivers from death and moderate-to-severe injury,^{1,2} recently it also has been reported to be associated with chemical keratitis,³ corneal stromal edema,⁴ and vitreous and subretinal hemorrhage.⁵ We have encountered a case in which a normal air bag may have caused a driver's corneal endothelial cell loss.

The corneal endothelium is essential for the maintenance of corneal clarity. Because it is well known to have no mitotic activity, cell loss may lead to other ocular complications, principally related to defects in corneal hydration. The presence of corneal endothelial cell loss after air bag inflation suggests that unexpected deformity of the eyeball may occur with normal use of this device.

In this study, we evaluate corneal endothelial cell loss caused by several types of air bags. We believe that ocular effects should be considered in further refining air bag technology.

Case Report

A 24-year-old woman was involved in an automobile accident that caused inflation of an air bag in her automobile. The patient was examined by ophthalmologists 3 hours after the accident; she experienced bilateral blurred vision and photophobia. Visual acuity was 20/200 in the right eye (20/100X + 0.50 diopters [D]) and 20/300 in the left (20/200X + 1.00 D); corneal stromal edema and interpalpebral epithelial defects were observed. Corneal endothelial cells were observed and counted by specular microscopy. Four days after the injury, the cell count was 1044.3

Originally received: ~~XXXXXXXXXX~~ 1992.

Revision accepted: 1993.

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2. [REDACTED]

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The authors have no financial interest in any of the equipment used in this study.

Department of Obstetrics

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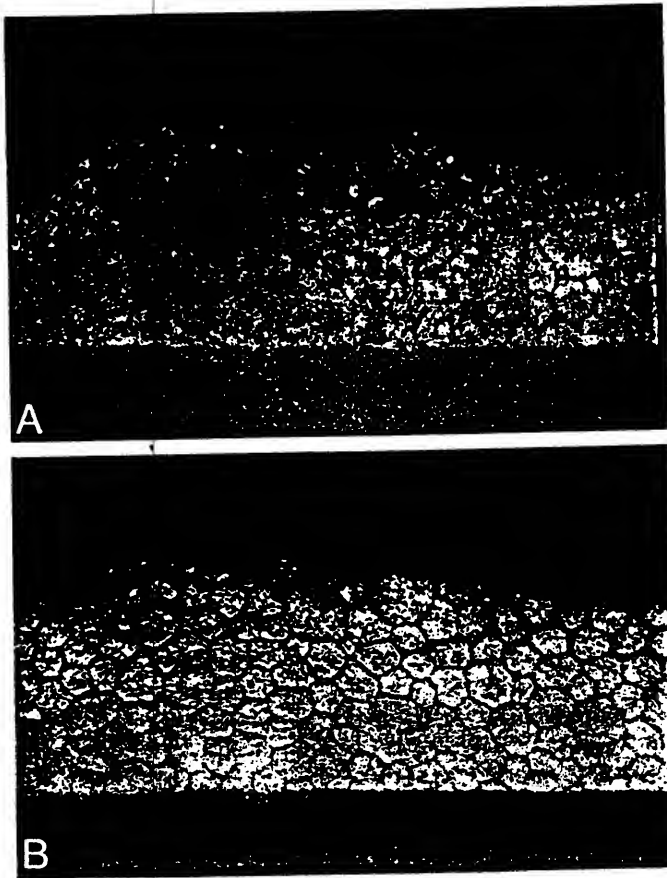


Figure 1. Specular microscopic observation at 4 days (A) and 4 months (B) after the injury. Although the patient's visual acuity recovered, 51.5% of corneal endothelial cell loss still remained even 4 months after the injury.

cells/mm² at the corneal center (Fig 1A) and 2740.0 cells/mm² at the periphery. Four months after the injury, 1330.6 cells/mm² were observed at the center (Fig 1B). Although visual acuity improved to 20/15 in the right eye and 20/40 in the left (20/17X - 0.37 D), 51.5% of endothelial cell loss still remained compared with the peripheral value measured 4 days after the injury ($P < 0.05$).

Materials and Methods

We devised a system to test air bag inflation that simulated conditions inside an automobile. A disposable air bag cartridge was fixed in the center of the handle. The crash test dummy was outfitted with two metal orbits (Fig 2A), each 30 mm in diameter, 45 mm in depth, and with 8 small holes inferiorly (Fig 2B). We made five different air bags from three air bag weights (ratios of 100%, 80%, and 60%) and three inflator powers (ratios of 100%, 75%, and 60%) (Table 1).

Forty-two porcine whole eyeballs were used in a test of distance-related damage with types A and B air bags. 30 were used in a test comparing all 5 air bags, and 10

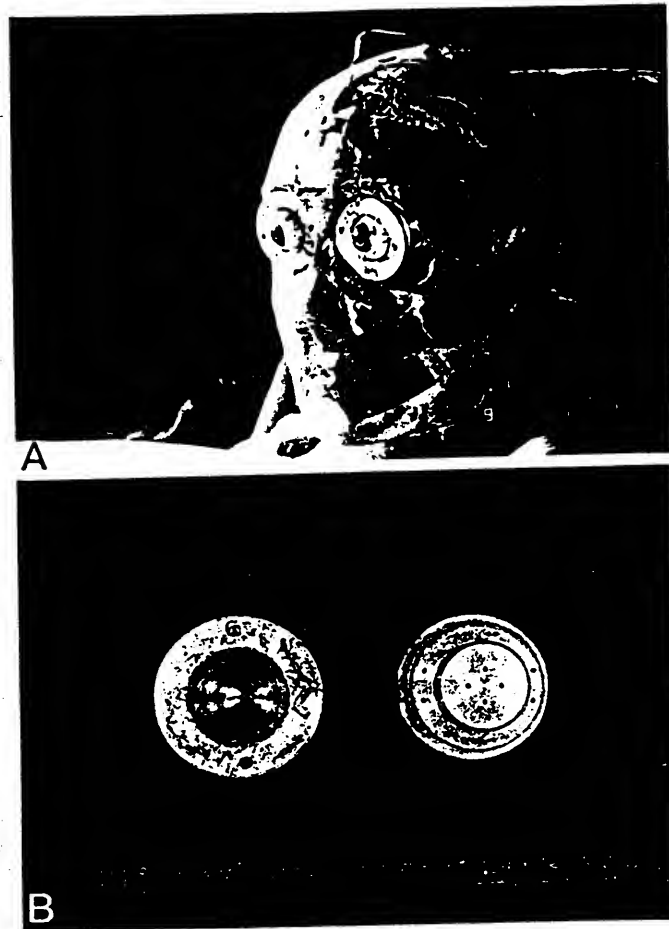


Figure 2. A, the originally developed head portion of the dummy, with attachments for two metal orbits. B, the metal orbit, measuring 30 mm in diameter and 45 mm in depth, with eight small holes inferiorly.

were used as controls. All eyes were stored in ice and used within 8 hours of enucleation.

Peribulbar tissue, including the muscles, was carefully removed with fine forceps and scissors. After cotton was placed in the bottom of the metal orbit, the eyeball was fixed in place with four 4-0 silk mattress sutures at the equator. Suture tension and the amount of cotton were adjusted to maintain intraocular pressure of approximately 15 mmHg as estimated by palpation.

Table 1. Types of Air Bags

Type	Power of Inflator (type 1 = 100%)	Weight of Bag Material (type x = 100%)
A	1 (100%)	x (100%)
B	2 (80%)	y (75%)
C	3 (60%)	z (60%)
D	1 (100%)	y (75%)
E	2 (80%)	x (100%)

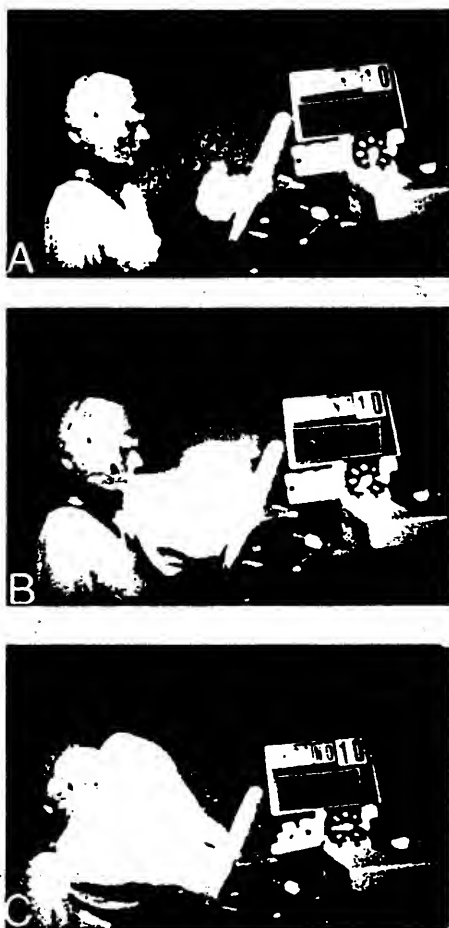


Figure 3. The movement of the inflating air bag and dummy. A, the air bag inflates, breaking the shell. B, the bag impacts against the upper chest and neck of the dummy. C, the bag strikes perpendicularly into the face.

For the test of distance-related damage, the crash test dummy was seated with eyeball-air bag distances of 160, 240, and 320 mm, with seven air bag deployments at each distance. For the comparison of the various air bag types, the eyeball-air bag distance was maintained at 240 mm, each with seven deployments.

All experiments were recorded by a high-performance video camera, which records 3000 frames/second, to evaluate the movement of the air bag and the crash test dummy's head. The pressure inside the air bags also was monitored.

Immediately after each test, the corneoscleral flaps were removed by careful limbal incision using ophthalmic scissors. The flaps were cut into three corneal strips with a razor blade.

Trypan blue (0.25%) was applied to the central corneal strips for 60 seconds, and the strips were then washed in saline. Alizarin red (0.2%, pH 4.2) was applied to the strips for 60 seconds, after which the strips were again washed in saline. Four light microscopic pictures were then taken of each strip.

The area of damaged corneal endothelium was traced and analyzed quantitatively by a special system (StatView SE). The endothelial damage rate was defined as the ratio of the area of damaged endothelium to that of the entire pictured endothelium.

Results represent the mean \pm standard deviation for each experiment. Determination of significant differences (unpaired Student's *t* test) was performed using the commercially available software program StatView SE (Abacus Concepts, Berkeley, CA).

Results

Figures 3A to 3C show the movements of the crash test dummy as it strikes the inflating air bag. After initial deployment (Fig 3A), the air bag expands against the upper chest and neck of the dummy (Fig 3B) and finally expands

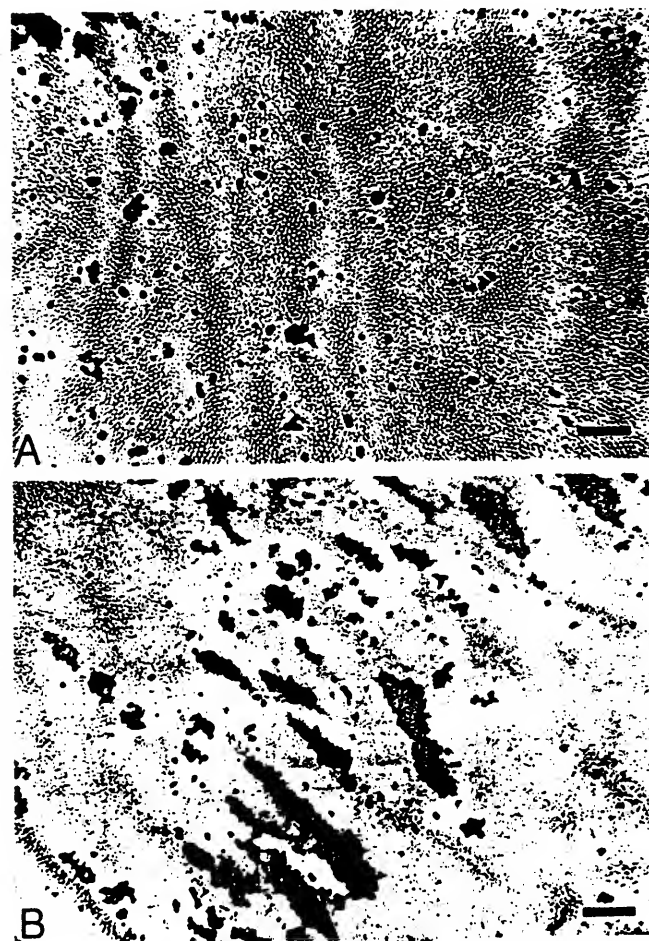


Figure 4. The damaged endothelium after air bag impact (bar = 300 μ m). A, type C, 240 mm. Scattered areas staining with alizarin red were observed. B, type A, 240 mm. Areas of widespread staining with alizarin red, indicating detachment of Descemet's membrane or endothelial loss, were observed. Endothelial cell staining with trypan blue indicates damage to the cellular membranes.

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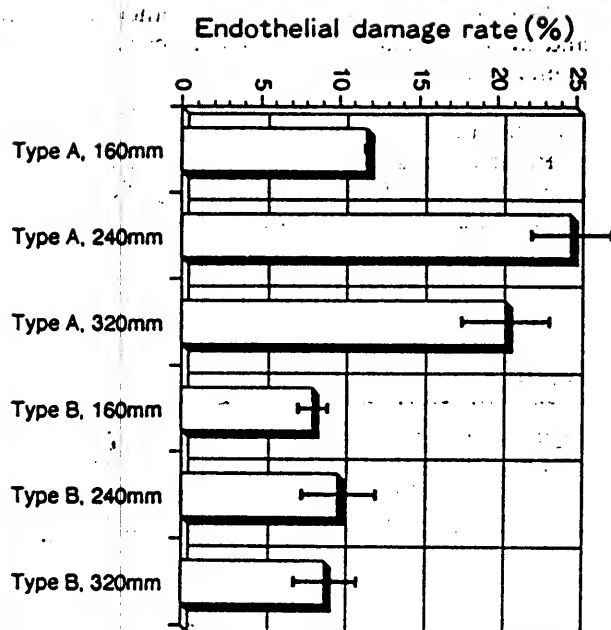


Figure 5. The endothelial damage rate for types A and B air bags at different distances.

perpendicularly into the face (Fig 3C). The actual impact at the eye was hidden by the air bag.

In the control eyes, the intercellular space was stained with alizarin red, whereas only a few cells were stained with trypan blue, indicating endothelial cell damage.

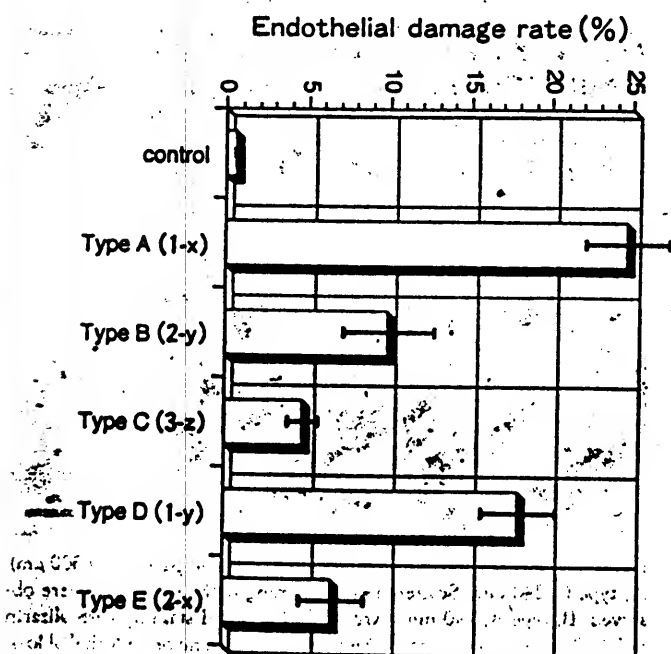


Figure 6. The endothelial damage rates for types A to E air bags at 240 mm.

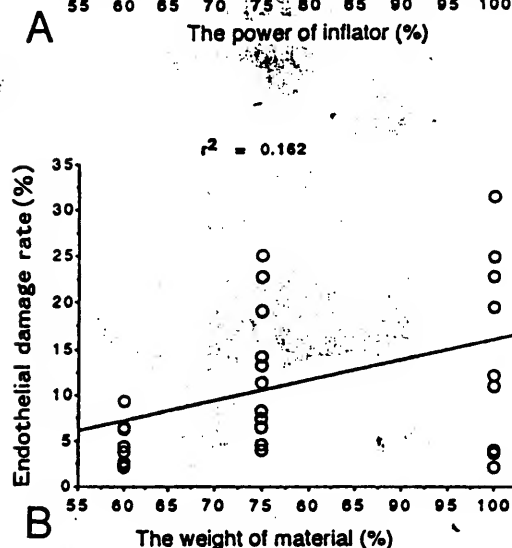
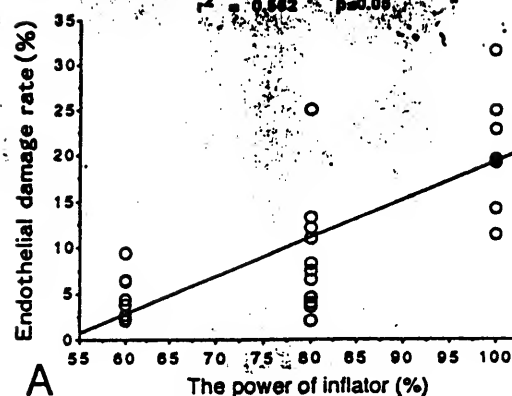


Figure 7. The correlation between (A) endothelial damage rate and the power of inflators (a, $r^2 = 0.56$, $P < 0.05$) and (B) the weight of the bag materials ($r^2 = 0.16$).

Examples of damaged endothelium after air bag deployment for type C at 240 mm and type A at 240 mm are shown in Figures 4A and 4B, respectively. Widespread staining with alizarin red, indicating detachment of Descemet's membrane or endothelial loss, was observed. Considerable endothelial cell staining with trypan blue, indicating cellular membrane damage, also was observed.

The endothelial damage rates for air bag types A and B as a function of eyeball-air bag distance are shown in Figure 5. The damage rates for type A air bags were $11.6 \pm 7.1\%$ at 160 mm, $24.6 \pm 5.1\%$ at 240 mm, and $20.5 \pm 8.4\%$ at 320 mm, while those for type B air bags were $8.3 \pm 4.3\%$ at 160 mm, $9.9 \pm 7.3\%$ at 240 mm, and $9.1 \pm 7.8\%$ at 320 mm. Endothelial damage was greatest at 240 mm for both air bag types. These differences were not statistically significant.

The endothelial damage rates for air bag types C, D, and E at 240 mm were $4.7 \pm 2.5\%$, $18.0 \pm 5.2\%$, and $6.5 \pm 4.6\%$, respectively (Fig 6). At this distance, the damage rates for types A and B were each significantly greater than those for type B, C, and E ($P < 0.05$). The damage rate for type B was significantly greater than those for

Corneal Endothelial Cell Loss and Air Bags

types C and E ($P < 0.05$), and the damage rate for type E, in turn, was significantly greater than that for type C ($P < 0.05$).

The endothelial damage rates were correlated with the power of the inflating module ($r^2 = 0.56$, $P < 0.05$) (Fig 7A) but not with the weight of the air bag material ($r^2 = 0.16$) (Fig 7B).

Discussion

After air bag impact, corneal cells with trypan blue, indicating damage of cellular membranes, and with alizarin red, indicating exposures of Descemet's membrane were observed. The mechanism of the endothelial cell damage is uncertain, but one possibility is cellular expansion caused by abrupt corneal deformity, similar to that seen in BB gun injuries.^{6,7} Direct contact between the corneal endothelium and the iris or lens may cause substantial endothelial cell loss.

In standard crash tests (a car hitting a wall at 50 km/hour), air bag inflation is initiated 15 msec after impact. Nitrogen gas inflates the bag, breaking the shell, and the bag expands forward. Fifty milliseconds after impact, the air bag finishes expanding and briefly maintains constant volume and pressure by drawing off the gas from two exhaust holes at the back of the bag. A passenger who sits in a normal position and uses a seat belt will not impact against the air bag for at least 60 msec after a crash, and will thus be protected from crashing directly against the steering wheel or windshield.

Conversely, as in the case we reported, a driver positioned very near the air bag cartridge could impact the air bag during the inflation and expansion process. We seated the dummy at distances ranging from 160 to 320 mm from the air bag cartridge and observed slightly

greater endothelial cell loss at 240 mm, which was the distance we used for all subsequent tests. This effect may be caused by deployment of the anterior portion of the air bag, which is reported to reach a maximum velocity at approximately 200 mm from the cartridge.

We observed significantly greater endothelial cell loss for air bags with greater inflator powers. Unfortunately, this power may be necessary to speed expansion and maintain volume and pressure for proper impact absorption. However, lighter materials, which may cause less ocular trauma, may be practical without compromising passenger safety.

Since the corneal endothelium is essential for the maintenance of corneal clarity and is well known to have little or no mitotic activity, cell loss can have serious ocular ramifications. We believe that ocular effects should be considered in further refining air bag technology. To this end, our technique may be used to examine any number of air bag and passenger variables.

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